Nine Thousand Miles of Concrete

A review of Second World War temporary airfields in England

Historic England

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Front: Halesworth, Suffolk – an excellent example of a Class 'A' airfield which opened in 1942 for the US 8th Army Air Force (AAF Station 365). Operating first P-47 fighters, then B-24 bombers, it was later used by the Fleet Air Arm (HMS Sparrowhawk) until closure c.1947. Until recently it was a poultry farm.
This photograph was taken in 2009 by Richard Flagg – the runways have since been removed.

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This report looks at the intricate subject of Second World War temporary airfields; it briefly examines the planning, design and construction of airfield landscapes, the numbers and types built, and the reasons for their post-war demise. Temporary airfields in England have been fading from the landscape at an alarming rate, so much so, that only a fragment of the infrastructure and pavements survive today and much of this has disappeared without proper recording.

The report was commissioned by English Heritage as part of the National Heritage Protection Plan (project 6370). There are two aims:

- To list and assess the current condition of Second World War temporary airfields
- To identify the best surviving temporary airfield landscapes and building complexes.

What has become apparent whilst carrying out the research for this document is the fact that in many cases it can be very difficult to define a temporary airfield. This is largely because pre-war permanent stations were constructed in several phases which were carried out during peacetime as well as wartime. They may have started out as grass airfields but the majority ended up with hard-surface runways and aircraft hardstandings, constructed to the same standards as duration-only stations. For the same reasons the planning and design of pre-war station infrastructure may have started out as non-dispersed compact arrangements, but over the course of the war many of these were expanded using the dispersal principle.

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NINE THOUSAND MILES OF CONCRETE

1. INTRODUCTION

Military airfields planned between 1934 and 1939 were constructed as a direct result of the deteriorating political situation in north-west Europe. This construction programme is generally known as the RAF Expansion Period.

By the end of 1932 Germany had commenced to re-arm; Adolf Hitler became Chancellor on 1 February 1933 and in the next few years equipped an air force of major proportions. In an attempt to achieve parity with Germany's increasing air strength, the British (National) Government introduced a number of schemes for the expansion of the RAF, which followed in quick succession between 1934 and 1939. Five schemes were passed by the Cabinet – 'A', 'C', 'F' 'L' and 'M'. Another three – 'H', 'J' and 'K' were formulated but never went beyond the proposal stage, although many new RAF stations proposed under these plans became part of the next scheme to be passed by the Cabinet. Schemes 'B', 'D', 'E' and 'G' never reached the point of formal submission. This expansion through the successful schemes resulted in a large-scale rebuilding programme with existing stations being modernised in keeping with numerous new RAF aerodromes then being built between 1934 and 1940.

New buildings were designed on a comprehensive basis, with permanent single and two-storey buildings of character and uniformity. The expanded RAF required a large number of new stations and the progress of the expansion programme was achieved through careful planning and design, based around a system of standardised 'type' designs. Buildings of this nature were erected at the majority of airfields and in respect of facing and cladding, materials under Scheme 'A' were modified only in keeping with local conditions. Each of these type designs had numerous drawings in support of the building. These include architectural plans and elevations, mechanical and electrical drawings (M&E), plus heating and ventilation (H&V) diagrams. The advantage of this scheme, was that a complete set of drawings for one station would serve all stations of the same type (permanent or temporary bomber or permanent or temporary fighter for example).

A style of simple, well-proportioned Georgian architecture was at first adopted with the use of hand-made facing bricks of the same colour and texture for all buildings, and roofing tiles which were also selected for colour and texture to be appropriate to the district. At first roofs were covered with red sand-faced tiles, double Roman interlocking types for technical buildings and plain or pan tiles for domestic buildings. Steel casements were utilised for technical buildings and double-hung timber sashes for domestic structures.

Later, under subsequent schemes of the expansion, came a change from brick to all-concrete construction for technical buildings, but domestic ones remained in brick. Roofs were now flat, constructed of fire-proof slabs of concrete. Established aerodromes such as Duxford (Cambs) and Tangmere (West Sussex) were extended with buildings of the same designs as the new stations, and while a change from brick to concrete took place on new aerodromes, brick continued to be used for exterior walls and with pitched roofs in lieu of flat.

An airfield designed under Schemes 'C' through to 'L' might also have buildings from subsequent schemes as the airfield was expanded. The exception is Scheme 'M' which was unique, occurring during a transition period; the designs were of a peace-time permanent nature, but were built during a period of war. It included certain austerity measures such as a change from permanent brick and concrete to all-steel for hangars as well as a reduction in their number. These stations were often not completed until 1940–41. At the same time came the first phase of temporary airfields, constructed solely with buildings of a transitory nature.

Initially these airfields were similar to the pre-war stations in that they were non-dispersed, (dispersed sites were added later). Subsequent phases of airfield construction were all based on dispersal, with large groups of domestic buildings arranged as a number of small groups scattered into the surrounding countryside. The buildings themselves were in complete contrast to the pre-war designs, being generally of single-storey brick or prefabricated types designed to last only for the duration of the war.

The landing grounds of pre-war military airfields were generally grass surfaced and when built were quite small, having a square-shaped plan-form with sides nominally 1,000 yards long. Airfields built during hostilities as well as pre-war stations were increased in size, often through a number of different stages which included the construction and subsequent extensions of hard runways.

2. One Vast Aircraft Carrier

On 31 August 1945, the journal '*The Aeroplane'* published an article on the construction of airfields in Britain. It briefly examined the Air Ministry Directorate General of Works (AMDGW) and its contribution to the war effort in organising the largest constructional programme in British history. In the process of creating the temporary airfields, the article described the UK as '*one vast aircraft carrier anchored off the north-west coast of Europe*'.

The AMDGW was responsible for the design, execution and maintenance of all RAF building and civil engineering works in both UK and overseas territories. It was one of the technical branches of the Civil Service and a directorate within the structure of the Air Ministry, coming under the auspices of the Air Member for Supply and Organisation. Personnel were drawn from men and women of the following professions – architectural, quantity surveying, land agency, valuing and engineering (civil, mechanical and electrical).

The administrative side of the AMDGW was under the control of civil, mechanical and electrical engineers from the director-general down to the assistant civil engineers, each of whom looked after three or more airfields or supply depots. Below these were the clerks of works and men of all trades connected with the repair and maintenance of buildings, roads, runways and electrical distribution systems.

Aerodrome construction in the UK was carried out under contract to the Air Ministry by public works contractors, using civilian labour drawn from the building and civil engineering trades, and also from other countries including Ireland. In the early stages of war, the Air Ministry had selected a small number of key contractors for large-scale airfield work, and from this grew a contracting army of 136 firms who shared some 800 separate contracts. At least one of these companies was set up as a direct result of the war, this being British Runways Ltd – a company formed by an amalgamation of En-Tout-Cas Co Ltd and British Bitumen Emulsions Ltd.[1]

The inception of a new aerodrome, from the choosing of the site by planners, up to the stage at which the contract for the construction was let, conformed to an established discipline. Under the 1939 Compensation (Defence) Act, a district valuer visited each of the various landowners, armed with a hand-coloured 6-inch OS map, the colours representing the various fields occupied by each owner. A detailed list was then prepared based on each of these identifying the owner, occupier, area of holding, rent, tenancy type and valuation. For example at Lulsgate Bottom (Somerset – now Bristol Airport), the valuation totalled £16,000 for a combined area required by the Air Ministry (airfield only) of 339.3 acres, acquired from seven holdings.[2] The valuation was then approved by the Supervising Lands Officer and the work would then go ahead.

Close liaison throughout this process was maintained with other Government departments and certain public bodies, such as the County War Agricultural Executive Committees, the local electric supply company and catchment boards (land, drainage and fisheries). It was possible to make certain minor alterations in layout at the request of private land owners to suit their agricultural interests. Drainage facilities required the most intricate and extensive planning, with the Geological Survey Department being consulted as to the depth and possible yield of water from bore holes. This was the source from which many aerodromes were fed, in those cases where the nearest local water supply company could not cope with the essentially large daily consumption. The maximum rainfall figure likely to occur in any region was used as the basis of calculation for the disposal of water flowing from the many acres of concrete surface. The water was often led into streams and ditches which occasionally had to be enlarged for considerable distances away from the airfield. The local War Agricultural Committee and Catchment Board were interested in the possibility of the flooding of agricultural land as a direct result of the construction of aerodromes within their areas of jurisdiction.

Electricity for lighting and power was as far as possible obtained from the nearest local supply and fed into the airfield through a main sub-station. *The Aeroplane* article estimated that over 336,000 miles of cable had been laid on RAF stations, which included the complexities of airfield approach and ground lighting and its control facilities.

The key to this success lay in standardisation, backed up by the men and women under the leadership of their Director-General of Works, Sir Ernest Holloway.[3]

3. NUMBERS AND SCALE OF TEMPORARY AIRFIELDS

The facts and figures surrounding the costs and construction of UK wartime temporary airfields differ considerably depending on source. Here are two:

The Aeroplane article estimated that the AMDGW had spent £600m in the first five years of war – the total area of concrete laid in runways, perimeter tracks and aircraft dispersal points was around 160m square yards. Sir Archibald Sinclair had, in Parliament, compared this area with a 9,000-mile-long, 30-feet-wide road from London to Peking. The weight of the stone aggregate required to manufacture this large expanse of concrete, exclusive of the weight of cement, was in the region of 30m tons, or sufficient to fill a convoy of average-sized lorries stretching one-and-a-half times around the world at the Equator. Also, one million prefabricated buildings were erected to provide workshop, technical, training and accommodation facilities (this figure would include non-airfield sites such as depots and training establishments).

The Civil Engineer in War (Vol.1, published in 1947) puts the cost of an average heavy-bomber airfield, exclusive of any buildings or services, at over £500,000. During the war years, 444 RAF stations were constructed in the UK with paved runways, perimeter tracks and hardstandings, at a cost of £200 m, excluding buildings. (In 1939 only nine airfields had hard runways.) During the peak constructional year of 1942, new airfields were becoming available at an average rate of one every three days, in addition to 63 existing stations receiving major extensions.

According to the *Aeroplane Directory*, in 1945 the UK contained 720 operational service airfields (including flying-boat bases), occupying in total around 360,000 acres; by 1965 the number had dwindled to around 100 with a further 50 or so being reserved for other military purposes.[4]

Number of airfields in the UK, 1935–91

Year	Military	Licensed Civil
1935	60	90
1940	280	0
1945	720	
1950	270	90
1955	210	105
1960	130	115
1965	100	125
1984	60	170
1991	66	135

From the beginning of 1935 to the outbreak of war, around 100 new service airfields were established, and in addition 110 civil airfields were requisitioned during 1939, giving a stock of 270 available for military use by 1940. During this expansion phase, two-thirds were established outside south-eastern England, so that by 1940 this area contained only 42 per cent compared with 50 per cent in 1935. Few were built in the Home Counties, but in East Anglia there was a significant extension eastwards, and a similar expansion northwards into the Vale of York. Other new areas included north Wiltshire, Gloucestershire and the Oxford region. Stations were also established for the first time since the First World War in Cornwall, Cumberland and Shropshire.

During the Second World War some 450 new service airfields were established. In England alone around 280 hard-runway airfields were created, with a further 100 having grass or metal-track strips. (Some of these had begun construction before the outbreak of hostilities.) The rate of construction increased to its peak in 1942, when 125 were commissioned (around ten per month), thereafter it declined until 1945 when it ceased.

For strategic and practical reasons the majority were located in Eastern England, but the ten counties with most airfields are believed to be as follows:

Lincolnshire (48)	Yorkshire (43)	Norfolk (37)	Suffolk (34)
Hampshire (34)	Essex (24)	Wiltshire (24)	Oxfordshire (20)
Berkshire (18)	Gloucestershire (18).		

During the Expansion Period (1934–40) the average size of a service airfield was around 400 acres; as an example South Cerney (Glos), a grass airfield is 370 acres, although exceptional cases such as Upavon (Wilts) extended to nearly 1,000 acres. A number of other chalk-based stations, such as Boscombe Down (Hants) and Netheravon (Wilts), covered an area of around 600 acres each.

By 1945, the landing ground area had increased to between 600 and 850 acres, mainly as the result of having hard-surface runways built:

Bassingbourn, Cambs (600)	West Raynham, Norfolk (761)	Syerston, Notts (699)
Lee on Solent, Hants (504)	North Luffenham, Rutland (847).	

The average for fighter stations protecting London was quite small:

Kenley, Surrey (237)	Northolt, Middx (508)	Debden, Essex (416).

Temporary stations with hard surface runways at the end of the Second World War averaged around 500 acres:

Watchfield, Oxon (243)	Dunkeswell, Devon (364)	Merryfield, Somerset (401)
Rufforth, Yorks (427)	Wymeswold, Leics (497)	Dunsfold, Surrey (513)
Chivenor, Devon (551)	Strubby, Lincs (661)	Portreath, Cornwall (873).

Extended Cold War bases are significantly larger: [5]

Wethersfield, Essex (817)	Chelveston, Northants (839)	Gaydon, Warwicks (877)
Waddington, Lincs (1,064)	Coningsby, Lincs (1,069)	Leeming, Yorks (1,085)
Greenham Common, Berks (1,259).		

In 1935 airfields occupied an estimated 37,000 acres, of which 25,000 were held for service use and 12,000 for civil use. By 1940 service airfields accounted for 105,000 acres, of which 63,000 acres had been added for new expansion stations; there were 17,000 acres of requisitioned civil sites which had grown by about 5,000 acres during the late 1930s.

During the conflict a further 255,000 acres were requisitioned, bringing the total held by the various service departments in 1945 to 360,000 acres, representing an area a bit larger than the whole of Bedfordshire. In 1945 there were over 30,000 acres of service airfields in Lincolnshire, which was more than the whole of the UK just ten years later.

4. Airfield and Runway Construction

Before the Second World War service airfields tended to be broadly square in plan, based on an omni-directional grass landing surface with buildings arranged in a compact layout positioned at one end of the landing ground. At this time, the largest and most expensive civil engineering task of a pre-war permanent station was the construction of the hangars, but that of a wartime station was the runways and perimeter tracks.

During the six years of war about 175 million square yards of concrete, tarmacadam, or other hard surfacing were laid in paved runways and connecting tracks. In 1939 airfields had runways, (which had maximum dimensions of 1,000 yards by 50 yards), designed to take the load of the heaviest machine then in service – the Wellington bomber with an all-up weight of 32,000 lb and a tyre pressure of 45 lb per square inch.

In 1945 runways at a few selected bomber airfields were beginning to be constructed with main runway dimensions of 3,000 yards by 100 yards of high-grade concrete 12 inches thick, and were designed to take machines of a total load of 140,000 lb with a tyre pressure of 85 lb per square inch.

In 1942, a peak labour force of 60,000 men was employed in the UK exclusively on the civil engineering task of airfield and runway construction for the RAF. The excavation on airfield construction rose on individual sites from the order of 50,000 to as much as 3,000,000 cubic yards, while the amount of concrete rose from 16,000 to about 400,000 cubic yards. Thickness of concrete slabs increased from 6 inches to between 10 and 12 inches. Costs of expansion airfields with grass surfaces were around £0.7 m:[6]

Binbrook, Lincs – £749,000	Coltishall, Norfolk – £736,000
Cottesmore, Rutland – £711,000	Cranfield, Beds – £700,000.

Thus at the beginning of the Second World War, the RAF was provided mainly with grass airfields for all types of aircraft and for all purposes, either training or operational. Selection was based on factors such as meteorology, operational requirements, engineering factors such as the amount of earthworks required, and drainage. What was required ideally was a large flat but almost bowl-shaped plateau with good meteorological conditions, free from surrounding obstacles, with soil strength sufficient to provide a firm and stable surface under wet weather conditions, and with a strong smooth turf surface to act as a binding and wearing carpet.

Aerodrome drainage was quite different from other forms of land drainage as it was vital to get any water that fell on the surface away from it, or through it to natural or artificial drainage underneath, as quickly as possible. The object was to prevent instability of the subsoil and consequent reduction of load-bearing capacity. Factors included evaporation and absorption of water by special grasses, surface run-off by ground slope (bowl-shaped landing ground), removal by percolation (either natural or assisted under-surface drainage), reduction of water table, piping of ditches, and enlargement of existing outfall works to cope with the accelerated flow.

4.1 Paved Surfaces

The usual pre-war standard design provided for four strips, the main one of 1,300 yards by 400 yards and subsidiaries of 1,000 yards by 200 yards, with clearance zones at either end for flightway approach outside an angle of 1:15 glide and fanned at a 15-degree angle from the airfield boundary.

The requirement for runways was a consequential development of the airfield strip and its approach flightways. Aircraft weights and take-off/landing speeds, even before the Second World War, were reaching a state where a normal earth and grass surface, even artificially consolidated, was inadequate to withstand the wear of repeated heavy traffic. It was unreliable under wet-weather conditions and was unsatisfactory in regard to drag and friction at take-off and landing. In 1939 therefore, the necessity for paved or prepared runways as an essential part of the airfield strips was accepted for those anticipated for iminent heavier aircraft.

In February 1940 bomber airfields were designed with three strips with a minimum length of 1,000 yards, as near 60 degrees to each other as possible. The main one was 400 yards wide and the two subsidiary strips 200 yards wide. Along the centre of each strip were hard runways, 50 yards wide by 1,000 yards long.

The three-paved runway arrangement makes up about two-thirds of the internal layouts of disused airfields. These displayed various permutations on runways set at about 60 degrees to each other and connected by an outer perimeter track.

4.2 Class 'A' Standard

During 1942, the ultimate war-time standard for RAF operational airfields was created and was known as 'Class A'. The construction of all new stations and extensions to existing airfields would conform to the new criteria.

Dimensions in yards	Hard runway		Strip width	Overshoot each end
	length	width		
1 Main	2,000	50	400	nil
2 Subsidiaries	1,400	50	200	100

Perimeter tracks were 50 feet wide.

Though the majority of post-1942 stations were built to Class 'A' standard, a small number were developed late in the war to a level beyond this (see 4.4).

4.3 Emergency Runways

Three emergency, multi-lane 'crash strips' for returning disabled bombers were built:

Carnaby (Yorkshire) Manston (Kent) Woodbridge (Suffolk).

The prepared area was a strip of 4,000 by 400 yards. It contained a single three-lane runway 3,000 by 250 yards. This was split into nine 'panes', each 1,000 by 83 yards, with individually controlled coloured airfield lighting.

4.4 Very Heavy Bombers and Transport Aircraft

In 1944 several stations were designed for special purposes, and three airfields for heavy bomber and one for transport aircraft were developed to a three-runway standard well in excess of the usual Class 'A'.

They were Lakenheath (Suffolk), Marham and Sculthorpe (Norfolk), and Heathrow (Middx).

Dimensions in yards	Hard runway		Strip width	Overshoot each end
	length	width		
1 Main	3,000	100	400	200
2 Subsidiaries	2,000	100	250	200

Perimeter Tracks were 100 feet wide.

In addition St Mawgan in Cornwall was also upgraded to a 3,000 by 100 yard main runway with a 2,000 by 50 yard subsidiary (plus an existing 1,400 by 50 yard runway).

The less numerous wartime-constructed grass airfields were provided with paved perimeter tracks which were often built to 30 feet width instead of 50, and either with or without full technical and dispersed domestic sites. This depended on the function and whether it was a parent or satellite station.

4.5 Landing and Navigational facilities

Civil airports in use in the late 1930s were generally equipped with powerful electric floodlights to allow aircraft to land at night. RAF stations initially used large numbers of paraffin flares to delineate the landing area. By 1939 a remote-controlled electric system known as Contact Lighting was in use at a few civil and military sites. It consisted of two parallel lines of lights set into the landing area – the aim being to assist the pilot in making contact with the ground in poor visibility conditions. By the end of hostilities 175 airfields had been equipped.

Whilst being clearly very useful to RAF pilots, it was also highly visible to enemy aircraft which might be operating and by 1941 a very different lighting system was under development. Officially called 'Airfield Lighting' (AFL) it was usually referred to as Drem, from the Scottish fighter station from which it originated. Its main features included approach lights which led the aircraft to the runway in use, taxi-track lighting to enable them to disperse having landed, and in most cases an orbitting aid in the form of an extensive 12-mile-long circle of lights around which aircraft could fly whilst waiting their turn to land. In addition the airfield lights were hooded and could only be seen by aircraft making a correct approach to land.

By the end of the war 421 airfields had been equipped with a Drem system. A typical bomber station would need 22 miles of underground and 30 miles of overhead wiring for its lighting equipment – this produced a total of 12,000 miles of overhead cabling, using half-a-million support poles, plus 9,000 miles of trenching for the buried wiring.

The Air Ministry were very aware of the problems of operating aircraft in inclement weather before the war and invested heavily both in time and money into an electronic landing aid. It was a redesign of the German civil Lorenz beam approach system and was called the Standard Beam Approach (SBA, manufactured by Standard Telephones and Cables Ltd). The original aim had been to equip every operational and training station with SBA but this had proved to be unfeasible largely due to congestion and topographical constraints. Beam approach training schools and flights (BATF) were set up, the latter administered by a flying training school, but often on a different airfield. They were originally called 'Blind Approach', but the term was changed to 'Beam Approach' as experience proved that a blind landing was almost impossible with inexperienced pilots.

The SBA system was badly designed and unreliable and was replaced later in the war by a superior radar system called Beam Approach Beacon System (BABS). Though the majority of pilots trained in its use flew bombers, the systems were available to Fighter, Coastal and Transport Commands.

Other aids installed at airfields were Wireless Telegraphy (W/T, Morse). Radio Telephony (R/T, speech) and Direction Finding facilities. Originally High Frequency (HF) equipment was common developing later into Very High Frequency (VHF) technology.

Increasing losses of aircraft due to their inability to land at their home or neighbouring bases in bad weather led to the FIDO project which was the design and installation of fog dispersal systems on 15 airfields in the UK – all in England, and mainly sited to assist returning bombers.[7]

They were:

Fighter Command: Blackbushe (Hants), Bradwell Bay (Essex)

Coastal Command: St Eval (Cornwall)

Bomber Command: Fiskerton, Ludford Magna, Metheringham, Sturgate (Lincs); Melbourne (Yorks); Graveley (Hunts); Downham Market and Foulsham (Norfolk); Tuddenham (Suffolk).

Bomber Command's Emergency Landing Grounds: Carnaby (Yorks), Manston (Kent), Woodbridge (Suffolk).

The system used enormous amounts of petrol (typically 90,000 gallons per hour for smaller installations), but was responsible for assisting over 2,700 aircraft, as well as allowing essential operations to take place when there was likelihood of fog later as the aircraft returned.

5. Temporary Airfield Types

Airfields constructed during the war fell into a number of broad categories. They would cater for a massive expansion of the RAF and Royal Navy from initial training to operational level.
At the beginning of 1942 the Air Ministry began to implement 'Target Force E' which would provide 4,000 heavy and medium bombers by mid 1943; this alone would need around 110 operational and training airfields. The arrival of the United States Army Air Force (USAAF) however pre-empted this and the revised plan, 'Target Force G', then called for the more modest 125 squadrons and 2,000 aircraft. The Americans aimed to have some 3,500 aircraft available in the UK, however their crews arrived in the UK ready for operations, and hence training facilities were minimal by comparison. These two forces would need some 125 airfields.

5.1 Relief Landing Grounds

The intensity of flying training and the increasing demand for pilots placed a great strain on the flying activities at both Elementary and Service Flying Training Schools. To relieve this, it was decided in 1939 to provide Relief Landing Grounds (RLGs). At the beginning of the war, owing to the extreme urgency of the requirement, those brought into operation during 1939–40 had the barest minimum of preparation. For a number of reasons a significant number of sites were requisitioned, but were not opened for up to a year later. This was partly due to the sheer scale of the airfield construction programme, also to the fact that priority had to be given to operational stations, and finally to shortages of materials and labour.

A reasonably level area was required, consisting of several fields with hedges removed and with the minimum of additional drainage. Initially perimeter tracks were a rare feature and only the least possible number of roads were built. As this gave problems for RAF refuelling vehicles using the grass surface, it was decided to construct perimeter tracks and motor transport roads on most of the RLGs. At this time only three huts were normally built – they contained the flight commander, time-keeper, crew facilities, and defence accommodation for a small guard of 12 men. Additionally a petrol installation of 4,000 gallons, and in few cases a Bellman aeroplane shed (page 14) made up the total facilities of an RLG in 1940.

By January 1941 however, extra huts were provided for a ground defence force of increased strength. Soon after, a further development took place at 11 RLGs, when extra huts were provided so that in an emergency a bomber squadron could operate from the airfield.
Later still, many RLGs were extended or developed as satellites, or even as parent stations in connection with the (Pilot) Advanced Flying Unit scheme – examples being Akeman Street (Oxon) and Babdown Farm (Glos). Personnel on these stations were usually between 750 and 1,000 officers, airmen and airwomen.

5.2 Operational Stations

Operational squadrons would be based on an operational station and under the control of Bomber, Coastal, Fighter, Transport Command etc. These bases were the front line of the RAF and USAAF and would have extensive fuel and ammunition storage facilities as appropriate. Bomber Command stations were planned to hold 800 tons of high explosive, (the 1939 level was 144 tons), but frequently stored over 2,500 tons in late 1944.

Staffing levels were of the order of 2,400 on an RAF bomber station and 2,800 on the USAAF equivalent.

5.3 Operational Training Units

Before joining an operational squadron, newly trained aircrew would spend a period at an OTU, the most complex of which was the bomber OTU. Here pilots, navigators, gunners etc would come together for the first time, form a crew and learn to work as a team.

The training at an OTU was in effect a postgraduate course as all air crew taking part were qualified to wear their appropriate badges: pilots' wings, the single wing of observers or the air gunners' badge. Crews were formed and trained together, being taught to work on the actual type that they were to fly on an operational squadron.[8]

These stations were similar in construction to the operational units, the principal difference being the addition of an instructional site which provided a number of synthetic trainers. The latter were frequently devices invented by an individual, then developed at a particular site. If submitted and approved by the Air Ministry's Synthetic Training Committee they would be manufactured and installed at a number of airfields, depending on their function.

Typical examples were:

Station	Specialised Trainers	Common Trainers
Fighter OTU	Hawarden Sighter, Manby Spotlight, Edmondes Deflector	Day/Night Landing, Fisher Front Gun, Hunt Recognition, Shadowgraph Recognition, Lamplough Night Vision, Harwell Box Radio, Simmons Astroscope, Instructional Fuselage
Coastal OTU	Tactical Floor	
Bomber OTU	Air Ministry Bombing, Turret, Instructional Bombing	
Naval	Torpedo Attack, Devonport Spotting, Avenger Turret, Night Attack	

Left: Turret training building at Goxhill (Lincs)
Right: Air Ministry (AML) bombing trainer at Pocklington (Yorks)

5.4 Advanced Landing Grounds

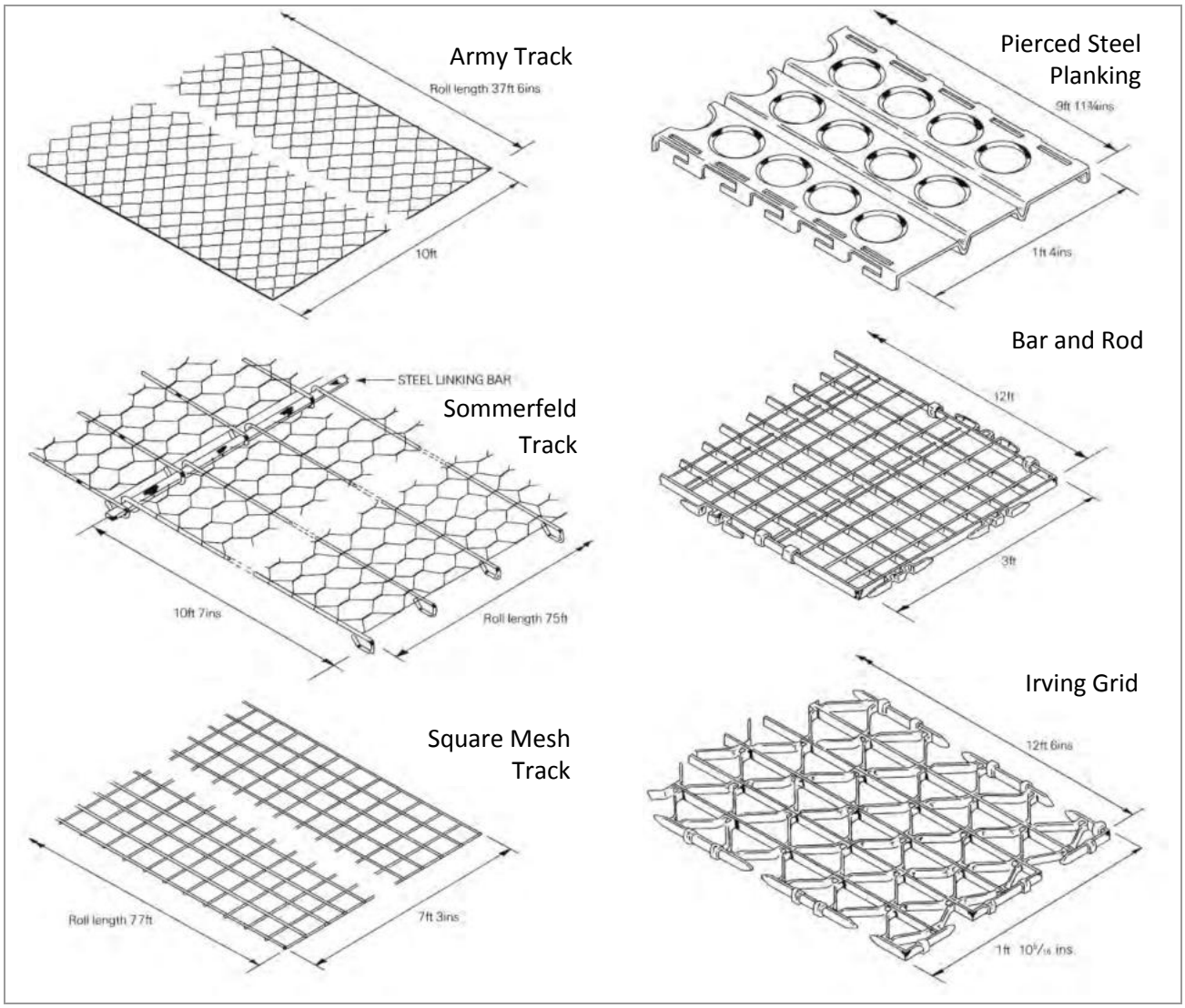
The Fall of France in 1940 meant that the south-east of England had become a dangerous place for airfields typified by the numerous attacks during the Battle of Britain. However by late 1942 a need arose for a number of sites known as Advanced Landing Grounds (ALGs), which would allow a tactical air force to attack a number of enemy targets, typically those near the French coast, in preparation for D-Day. From 70 possible sites, around 23 were eventually developed – examples being Bisterne (Hants), Funtington (Sussex) and Swingfield (Kent).

Since these stations would operate mainly single-engined aircraft, permanent hard runways would not be required and the specification was for a pair of 150-yard-wide strips of 1,600 and 1,400 yards in length. Metal track runways, 50 yards in width, were installed on these strips. Where possible, poor quality farmland was chosen for the sites. Ideally the long runway was aligned with the prevailing wind, with the shorter one at right angles to it. A narrow perimeter track ran alongside the runways for the use of support vehicles.

The ideal metal tracking was light in weight, easy to produce and structurally sound, i.e. it stayed in place when aircraft landed on it. Twelve types were developed during the war, the most common being:

- Army Track – a pre-war design which was better at making roads than runways, due to its inability to stay flat
- Chevron Grid – not very successful
- Sommerfeld Track – named after its Austrian inventor. It was used initially at all ALGs but was replaced where found wanting. It tended to work loose and was noted for ripping tail wheels off aircraft
- Square Mesh Track (SMT), also known as BRC (British Reinforced Engineering) after its designer. It gradually replaced Sommerfeld runways
- Channel Track – consisting of large interlocking steel panels. It was rarely used
- Pierced Steel Planking (PSP), a heavy-duty American idea which became prolific and very successful
- Bar and Rod – another American design which was lighter than PSP, but more difficult to manufacture
- Irving Grid – a third US design, based on the flooring used in the engine rooms of warships. It was used in very limited applications.

Hardstandings were provided, frequently for up to 75 aircraft; personnel accommodation was primitive and typically restricted to tents. All the ALGS had closed well before the end of 1944, their units having relocated to Europe.



5.5 Specialised Stations

A number of stations were used for specific purposes, e.g. Madley (Hereford & Worcs) functioned as a wireless operators' school, Hinton-in-the-Hedges (Northants) became the Signals Development Unit and Shobdon (Hereford & Worcs) was a glider training school with a double-width runway.

5.6 Satellite Landing Grounds

From 1940 some 50 sites were considered for storing new aircraft before they were delivered to RAF units. They would supplement the Aircraft Supply Units which had been designed before the war. All in the western part of the UK, they often comprised parkland and private estates. Buildings were kept to a minimum – an office/control building looking like a bungalow, tractor shed and typically four small hangars being provided. The staff was largely civilian.

5.7 Fleet Air Arm Stations

Most of the sites selected for the Royal Naval Air Service/Fleet Air Arm (FAA) had been recommended by the Air Ministry who had over a decade of experience in this field. Unsurprisingly the ministry frequently tended to offer airfields which had been found wanting in one way or another for their own requirements. Airfields handed over from RAF use would

remain with the existing three runways, however Admiralty designed stations were different. Operating generally single-engined aircraft, notable features were:

- Runways were shorter and only 30 yards in width, not 50 as in RAF airfields
- More runways were usually provided since the narrower undercarriage associated with folding-wing aircraft meant that these aircraft were inherently less stable in cross-wind conditions
- A few stations were equipped with Aerodrome Dummy Deck Landing facilities, in which a short section of one runway was equipped with arrester gear, lighting and markings as would be found on an aircraft carrier of the period.

A typical station would have four runways, one of 1,200 yards, one of 1,030 yards and two of 1,000 yards. The long strip was called the 'No Wind Runway'. There were many variations on this, a few examples (some Scottish) being:

Station	Runway Lengths (yards)				
Burscough, Lancs	1,240	S	S	S	
Crail, Fife	1,200	S	S	S	
Crimond, Aberdeenshire	1,200	1,200	S	S	
East Haven, Angus	1,220	1,060	1,015	S	
Henstridge, Somerset	1,200	S	S	S	S
Machrihanish, Argyll	1,190	1,030	1,030	S	
Ronaldsway, IoM	1,400	S	S	S	
Skeabrae, Orkney	S †	S †	S †	S †	
St Merryn, Cornwall	1,270	1,030	S †	S	
Twatt, Orkney	1,200	1,030	S	S	
Yeovilton, Somerset	1,215 †	1,160	1,070	1,060	
S = Standard 1,000 yard runway † denotes a 50-yard-wide runway. Crail had 33-yard-wide runways					

6. Buildings: Planning and Layout

Wartime-constructed airfields are generally distinguishable from pre-war airfields, not only by the dispersed nature of the airfield itself, but also by their large numbers of distributed domestic sites. These include communal sites, living quarter sites and sick quarters (see page 17), and are generally located scattered within the locality, but one or more of these could be sited up to two miles from the technical site.

The transition from peace to war brought about many design and changes in planning to the standard layout of RAF aerodromes. New non-permanent operational stations planned in 1939–40 represented the first phase of temporary stations, and were effectively, austerity versions of the peacetime stations. They were non-dispersed but built with single-storey temporary brick buildings and prefabricated hutting – examples include Chipping Warden and Polebrook (Northants), Goxhill (Lincs) and Holme (Yorks). Amongst the temporary structures, they would typically have a 'J' hangar – a permanent design originating from Scheme 'M'. The standard RAF portable aircraft hangar, the steel-framed Bellman aeroplane shed, was designed in 1936. These were built in large numbers to supplement permanent hangars and were also a feature of aircraft factories and temporary non-dispersed training airfields and camps which were constructed almost entirely in timber hutting.

Bellman hangar at Chivenor (Devon), 1989

The communal buildings at the operational stations were often placed between the technical buildings and a public road, as at Polebrook (where the guardhouse is at the entrance to the communal group and is similar to a pre-war station). Alternatively the communal buildings are on the other side of a public road and the guardhouse is on the technical site as at Jurby (IoM).

For the second phase of temporary airfields, a fully dispersed theme replaced the pre-war compact planning. From 1941 and until 1945, new stations were therefore designed and planned around dispersal. Buildings were now placed at random around a meandering road network, often making use of existing hedge lines and tree canopies as an aid to concealment. Key technical trades as well as flight and squadron offices, which on a peacetime station would normally occupy part of a hangar annexe, now occupied dedicated single-storey huts which were dispersed away from the parent hangar. Also in 1941, the Bellman gave way to the larger T2, (from Teesside Bridge & Engineering), as the standard transportable RAF hangar.

6.1 Temporary Brick

Permanent buildings designed during the Expansion Period were neither economical in materials used, nor in speed of construction, and the anticipation of war led to a rapid redesign. Drawings now had to be prepared for buildings of a temporary nature. Second World War single-storey temporary brick buildings were based on guidelines laid down by Air Ministry drawing numbers 222/40, 223/40 and 3323/40.

The half-brick hut (wall thickness of half a brick), otherwise known as 4.5 inch brick buildings, became one of the standard (and most common) forms of temporary construction. Bricks were laid in stretcher bond only, consisting of a wall having single bricks laid lengthways along the length of the wall which was consequently 4.5 inch thick. Buildings of this nature had external brick piers spaced at 10 foot centres and were built in spans of 18 and 28 feet. The piers supported steel or timber trusses which carried timber purlins supporting corrugated asbestos sheeting.

Walls were externally cement rendered and left fair-face inside ready for painting. Windows were steel multi-pane casements.

Temporary buildings were designed to have the same functions as the permanent structures on the pre-war stations. However, because they were only single-storey, and considering the requirements for passive defence, one or several buildings might be the equivalent of a single earlier pre-war building. As an example, the pre-war armoury would include the station and squadron armouries at ground floor level, and a photographic section on the first floor.
A temporary brick version might consist of separate huts forming the station armoury, plus up to three individual squadron armouries and a separate photographic building.

Hangars were similar in that a pre-war squadron might have two 'C' hangars at its disposal with a pair of annexes alongside both hangars – this would meet the total squadron needs with regards to stores, workshops, offices and changing rooms. At a temporary airfield the hangars had no annexes, hence the requirements of squadrons and flight needs were now met by individual huts.

6.2 Prefabricated Huts

During the late RAF Expansion Period, in the interests of timber economy and speed of production, it became necessary to consider other forms of temporary construction as alternatives to the high-class timber hutting, typically the sectional types 'A' and 'B', then in general use. As a result, the Gerrard 'X', 'Y' and 'Z' timber huts were introduced between 1939 and 1940; they were less robust and inferior in quality to the 1935–39 types.

By 1940, the timber shortage was so acute that alternative hutting types, using less timber, were developed for the Ministry of Supply. These included the Magnet (timber and concrete composite), Thorn (plasterboard and timber composite), Laing (plasterboard and timber composite) and the Maycrete and Nashcrete (concrete with timber trusses). These were all well below the standards normally required by the Air Ministry but were accepted for limited production due to the shortage of raw materials.

Metal-framed and clad Nissen hutting was universally re-introduced in 1940, and this system of construction proved to be the most successful of the factory-made huts. Originally invented in 1916 by a Royal Engineers Canadian, Major Peter Norman Nissen (1871–1930), Nissen huts were available during the Second World War in three spans (16, 24 and 30 foot). Many thousands of huts of this kind were produced and used extensively for both domestic and technical accommodation.

The Jane hut used a lightweight timber frame covered externally with corrugated iron sheeting. Revised Laing, and Gerrard types were purchased in early 1942 using frames of home-grown timber with corrugated iron sheeting.

Later in 1942, the Interdepartmental Committee on Hutting became the sole arbiter on design and production. Consequently supply of all types changed from the Ministry of Supply to the Ministry of Works (MoW). Asbestos hutting designed by Uni-Seco Ltd (asbestos and plywood), Turners Asbestos (the curved asbestos hut), and the Universal Handcraft hut were all introduced by the MoW.

The final family of prefabricated hutting used pre-cast concrete posts and panels, such as the British Concrete Federation (BCF), Orlit and the MoW's own standard hutting designs.

6.3 Fleet Air Arm Buildings

The Admiralty took over a number of former RAF airfields and therefore used the existing infrastructure; however on their own purpose-built stations they had an entirely different approach from that of the Air Ministry. Perhaps the best example of this is the FAA control tower. Through clever design, the Royal Marine Engineer's idea consisted of a common ground floor used by three different designs of control tower.

Dunino, a Scottish satellite station had the basic structure in the form of a single-storey building with a local control room. Anthorn (Cumbria) had the same ground floor with a first floor and a local control room.

The final and most common version as built at Henstridge (Somerset), Hinstock (Salop) and Inskip (Lancs) included the common ground and first floors, but with an additional third floor and a local control room.

Admiralty Control Tower at Hinstock (Salop) in 1996

Hutted camps and buildings tended to be MoW standard hutting with concrete wall and roof frames, with wall infilling of any suitable material found locally. Unlike any RAF station they would have a secure victualling, or rum-ration store.

A variety of hangars were used, and many stations had large numbers. Larger servicing sheds and workshops were typically the 'Naval' Bellmans, T1s, T2s, T3s and Callender-Hamiltons. These were used until 1943 when the Pentad hangar, with its characteristic canted sides, became the standard. The majority of hangars were smaller types suitable for folding-wing aircraft and were usually split into two groups – squadron and storage. Very early stations used Dutch Barns. Also found were the Fromson blister-shaped dispersal hangar and the Mains dispersal hangar and workshop – all of these being unique to FAA airfields.

6.4 Dispersed Sites

This term generally refers to locations outside and not immediately adjacent to the main airfield perimeter, most of which were used as accommodation and communal facilities. (To confuse matters some airfields had 'dispersal sites' on, or immediately adjacent to the airfield itself – Lulsgate Bottom (Somerset) had five such).

Dispersed sites fell into the following categories:

- Communal and recreational
- Barracks/quarters for all ranks, male and female
- Station sick quarters (SSQ)
- Sewage works with sedimentation tanks, filter beds, humus tanks etc
- Miscellaneous, including administration, radio facilities and remote water supplies.

Very often facilities were combined or spread across several sites, particularly when women were involved. Buildings were usually temporary brick or prefabricated hutting.

The number and allocation of dispersed sites varied widely depending on when the station was built and its intended function. The site plan numbering of these sites is very inconsistent – frequently 'Site 1' was the airfield itself, sometimes it was the main communal site, often this was left un-numbered and 'Site 1' was the first barrack/quarters. This is in direct contrast with First World War Training Depot stations whereby all building types, regardless of location, used the same numbering system.

Communal sites could have 20 or more buildings which might include messes for officers and sergeants, dining rooms, recreational and educational huts, shower, bath and toilet facilities, standby-set house and fuel compound, shops for groceries, rations, barbers, post office etc.

Barrack/quarters sites were usually mixed (officers, sergeants, airmen etc), though separate women's sites were normal. In the case of the latter, the communal and barrack sites were sometimes combined.

American stations frequently had a communal site, plus an airmen's mess site, and an officers/sergeants' mess site. RAF stations had a main communal site for all men, usually with a separate WAAF site. Most of the remaining sites were quarters sites; again WAAF sites were present, plus a sewage disposal site. In a number of cases there was an administrative site with the operations block, plus radio (R/T and W/T) and/or direction-finding (D/F) sites.

There was normally a sick quarters, either single sex or mixed, (in which case there would usually be a separate female ward) and would include an ambulance garage and mortuary.

Some examples of dispersed sites with their principal buildings are shown below.

High Ercall, Salop *(ASU and fighter OTU, 2,000 personnel in 13+3 sites)*

Communal – C/O's quarters, officers' mess, sergeants' mess, shops, WAAF rest room, institute, gym, decontamination
WAAF Communal – officers' mess, dining room and institute, barracks, and sick quarters
1 Barrack site – RAF officers and airmen
1 Barrack site – RAF and WAAF officers and airwomen
6 Barrack sites – RAF, officers, sergeants and airmen
1 Barrack site – WAAF officers, NCOs and airwomen
Sick quarters – RAF and WAAF
3 additional radio sites – VHF receiving, VHF/HF transmitting, D/F homing

Chipping Ongar, Essex *(USAAF operational heavy bomber, 2,800 personnel in 16 sites)*

Administrative site with station offices, operations block and bomb-sight stores
Communal site with shops and institute
Mess site 1 – officers' mess, sergeants' dining room
Mess site 2 – sergeants' mess, airmen's dining room, C/O's quarters
9 Barrack sites – mixed officers, sergeants and airmen
Sick quarters
W/T station

Desborough, Northants *(RAF bomber OTU, 1,900 personnel in 9 sites)*

Communal (all ranks) with dining room, officers' mess, sergeants' mess, institute, squash court, gym, decontamination, shops, education block, WAAF showers and ablutions
4 Barrack sites for all RAF (mixed ranks)
WAAF site with officers' mess, dining room and sergeants' mess, institute, living and sick quarters, decontamination
WAAF barracks – sergeants and airwomen
Sick quarters – presumed for all men

Dalton, Yorks *(RCAF bomber OTU, 1,300 personnel in 14 sites)*

Operations block site – no other buildings
Communal site 1 – officers' mess, sergeants' mess, dining room, institute, shops, decontamination
Communal sites 2 – C/O's quarters, officers' mess, sergeants' mess, airmen's dining room, institute, gym squash court, education block, decontamination
WAAF communal site with quarters for officers and airwomen, dining room, institute, officers' mess, sergeants' mess decontamination
7 Barrack sites for mixed officers, sergeants, airmen
WAAF barracks for sergeants and airwomen
Sick quarters for RAF and WAAF

Nuneaton, Leics *(Transport Command OTU, 1,400 personnel in 7 sites)*

Communal site – officers' mess, sergeants' mess, dining room, institute, shops
4 Barrack sites – all ranks
WAAF site – officers' mess, sergeants' mess/institute/dining room, sick quarters, decontamination, barracks for sergeants and airwomen

Cark, Cumbria *(Staff Pilot Training School, 1,000 personnel in 10 sites)*

Communal – RAF officers' mess, sergeants' mess, dining room, institute, YMCA, shops, education block, decontamination, tennis and squash courts, gymnasium
3 Barrack sites – mixed ranks
WAAF site with quarters, officers' mess, dining room and institute, decontamination
Sick quarters – all staff
3 Radio sites – W/T, permanent D/F, transportable D/F

Sleap, Salop *(Fighter OTU, 1,200 personnel in 6 sites)*

Operations block and crew briefing room
Communal – officers' mess, sergeants' mess, airmen's dining room, institute and NAAFI, shops, decontamination
1 Barrack site – (large 23 blocks)
1 Barrack site – (very large 46 blocks)
WAAF site including sick quarters (no men's sick facilities shown)
3 additional sites were defined as instructional, high-level tank and borehole

Perranporth, Cornwall *(Fighter Command, 1,000 personnel in 5 sites)*

Communal site – officers' mess, sergeants' mess, dining room, institute, shops, medical inspection and accident block, decontamination

1 Barrack site – NCOs and airmen

1 Barrack site – sergeants and airmen

1 Barrack site – airmen (no mention anywhere of WAAF facilities)

Bibury, Glos *(Advanced flying training, 650 personnel in 7 sites)*

Communal Site – officers' mess, sergeants' mess, dining room, institute, medical inspection

WAAF site – officers' mess and quarters, sergeants' and airwomen's barracks, shops, decontamination

4 Barrack sites – mixed ranks

Sick quarters – RAF and WAAF

Laing Hut at Twinwood Farm, Beds. (G Crisp)

Concrete BCF hut at Woolfox Lodge, Rutland

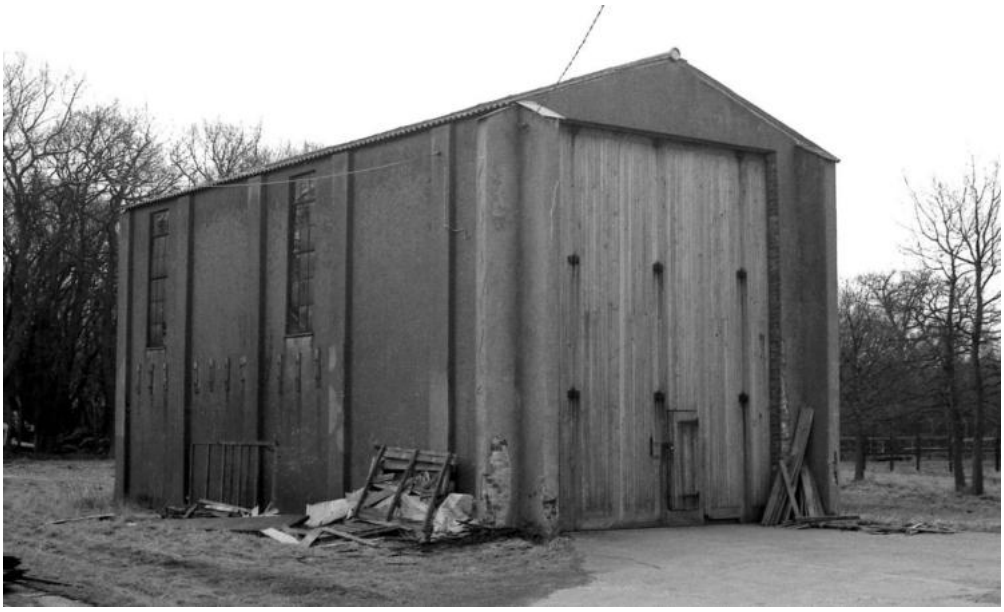
Handcraft hut at Panshanger, Herts (G Crisp)

Uni-Seco hut at Bitteswell, Leics

Temporary brick and Nissen dining room and cinema, Shepherds Grove, Suffolk

6.5 Key Building Types – Austerity Airfields and Dispersed Sites

Sites	Station	Typical Examples
Technical (main site)	All	Hangars, watch office, night flying equipment store, floodlight tractor and trailer shed, fire tender shelter, guardhouse, main workshops, main stores, motor transport sheds and stores, station HQ, operations block, bombing teacher, free gunnery trainer, Link trainer, turret trainer, dinghy shed, radar workshop, parachute store, station armoury, emergency water supply, works and bricks workshops/offices, air-raid shelters, blast shelters, pillboxes, light anti-aircraft gun posts
Technical (dispersed)	Fighter	Blister hangars flight offices, ablutions, sleeping shelters, latrines, air-raid shelters, fighter pens, battle HQ, defence huts, pillboxes, light anti-aircraft gun posts
Technical (dispersed)	Bomber	T2 hangar, B1 hangar (Ministry of Aircraft Production) flight offices, squadron armoury, general purpose huts, battle HQ, airfield defences, defence huts, air-raid shelters, pillboxes, light anti-aircraft gun posts
Ammunition Stores	Fighter	Ammunition stores, small arms ammunition (SAA), pyro stores
Bomb Stores	Bomber	HE bomb stores, incendiary stores, components stores, fuzed and spare bomb store, small bomb container stores, flame floats, SAA, fuzing sheds, pillboxes
Sewage Disposal Works	All	Sewage works, destructor house, tool shed
Administration	All	Picket post, operations block, station headquarters, blast shelters
Instructional	Operational Training Units	Picket post, AML bombing teacher, turret trainers, instructional classrooms, navigational trainers, Link trainer, AA dome trainer, blast shelters
Sick Quarters	All	Picket post, sick quarters, annexe, ward blocks, mortuary, air-raid shelters
RAF Communal	All	Picket post, gymnasium, squash court, cinema, institute, decontamination block, quarters, barracks, latrines, officers' mess, sergeants' mess, dining room, ablutions, emergency water supply, high-level water tank, stand-by-set house, blast shelters
WAAF Communal	All	Picket post, combined ablutions and decontamination blocks, quarters, barracks, latrines, air-raid shelters
RAF Quarters (several)	All	Picket post, officers' quarters, sergeants' quarters, airmen's barracks, ablutions, latrines, air-raid shelters
WAAF Quarters (several)	All	Picket post, officers' quarters, sergeants' quarters, airwomen's barracks, ablutions, air-raid shelters



Fabric store at
Foulsham, Norfolk

MT shed with
dispensing pump
at Foulsham

Parachute Store
at Strubby, Lincs

Gymnasium at Pocklington, Yorks

Operations Block at Goxhill, Lincs

7. Post Second World War

7.1 Defence Land Holdings Background

The first post-Second World War major review of defence land holdings took place in 1947, when it was concluded that a total of 1,027,200 acres in Great Britain were required for future defence purposes. The next review, published as the 'Nugent Report' in October 1972, concluded that MoD holdings amounted to 662,000 acres of land and foreshore – hence 279,200 acres of defence land had been released between 1947 and 1972. The Nugent report recommended that, beginning in 1973, a total of 97 sites should be released totalling around 32,700 acres. This included 12,107 acres of land either completely or partially occupied by airfields.

7.2 1971–73 Committee, Recommendations for Disposal

Airfield	Acres of Holding	Disposal	Cumulative Total
Bassingbourn, Cambs	600	75	
Chelveston, Northants	839	approx 583	658
Chivenor, Devon	551	521	1,179
Cranwell, Lincs	2,496	600	1,779
Debden, Essex	416	416	2,195
Dishforth, Yorks	633	22	2,217
Donna Nook, Lincs	1,502	235	2,452
Driffield, Yorks	812	approx 800	3,252
Greenham Common, Berks	1,259	170	3,422
Halton, Bucks	1,161	141	3,563
Hemswell, Lincs	764	702	4,265
Kinloss, Moray	1,606	88	4,353
Leconfield, Yorks	1,086	306	4,659
Little Rissington, Glos	788	90	4,749
Molesworth, Hunts	751	636	5,385
Oakington, Cambs	917	917	6,302
Pershore, Worcs	714	400	6,702
Rufforth, Yorks	427	approx 2	6,704
Strubby, Lincs	661	661	7,365
Swinderby, Lincs	657	250	7,615
Tangmere, Sussex	601	541	8,156
Ternhill, Salop	440	25	8,181
Thorney Island, Hants	2,795	1,037	9,218
Thurleigh (South), Beds	890	575	9,793
Watchfield, Oxon	243	243	10,036
Watton, Norfolk	747	93	10,129
Weston-super-Mare, Somerset	506	506	10,635
West Raynham, Norfolk	761	111	10,746
Wethersfield, Suffolk	817	14	10,760
Weybourne, Norfolk	85	72	10,832
White Waltham, Berks	416	416	11,248
Wisley, Surrey	303	303	11,551
Woodhall Spa, Lincs	621	556	12,107
Note that the list above was recommendations. Some stations, such as Debden and Chivenor, were removed from the list, while others like Rufforth were added.			

7.3 Post-war reductions and re-use

Under the 1939 Compensation (Defence) Act and the 1945 Requisitioned Land and War Works Act, the effects of war works could be compensated in respect of derequisitioned airfields, and the resale price of purchased airfields adjusted to take account of subsequent clearance costs.

In many cases the buildings have been auctioned off separately after the original land owner had been given first refusal (Critchell Down Rules). In rare instances other government bodies and local authorities have secured limited clearance under various acts, and the Civic Trust has organised voluntary clearances of huts and concrete.

Surplus airfields that have not been totally returned to agriculture, have been colonised by a large range of new uses, which in most cases are confined to the main built-over areas (hangars, runways and technical buildings).

Specific Use

Some sites were offered to other central government departments relating to nuclear research or nuclear power, e.g. Harwell (Oxon), Aldermaston (Berks) and Bradwell (Essex). Prisons were established at Acklington (Northumberland), Eastchurch (Kent), Ford (Sussex), Market Harborough (Leics) and Millom (Cumbria), while Home Office depots were located at Dunkeswell (Devon) and Milfield (Northumberland). The Composite Signals Organisation Station for GCHQ was established at Culmhead (Somerset). Industrial uses include Ashbourne (Derbs) and Hixon (Staffs); Lotus Cars took over Hethel (Norfolk), and motor racing circuits were developed at Castle Combe (Wilts), Croft (Yorks), Silverstone (Northants), Snetterton Heath (Norfolk) and Thruxton (Hants).

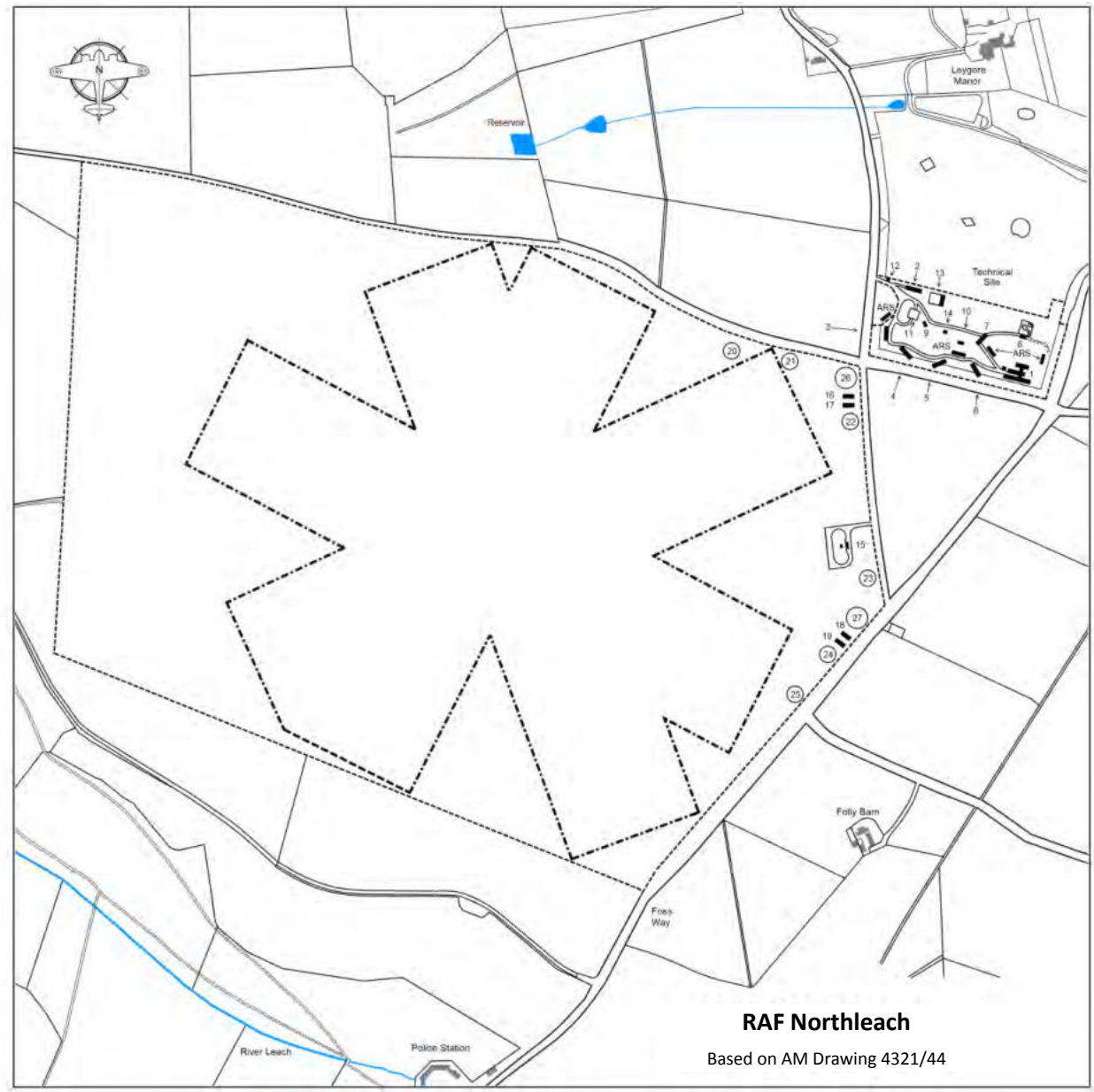
Agricultural Use

Factory farming has been another major re-use of airfields particularly in East Anglia where large expanses of concrete served as foundations for poultry units, often covering complete runways as happened at Halesworth (Suffolk, see front cover) and North Pickenham (Norfolk). In more recent times, airfields are becoming sites for wind farms, e.g. Lissett (Yorks), Melton Mowbray (Leics) and Millom (Cumbria). A number of sites have recently become solar farms, including Boxted and Gosfield (Essex), Wroughton (Wilts), Wymeswold (Leics) and many more are planned.

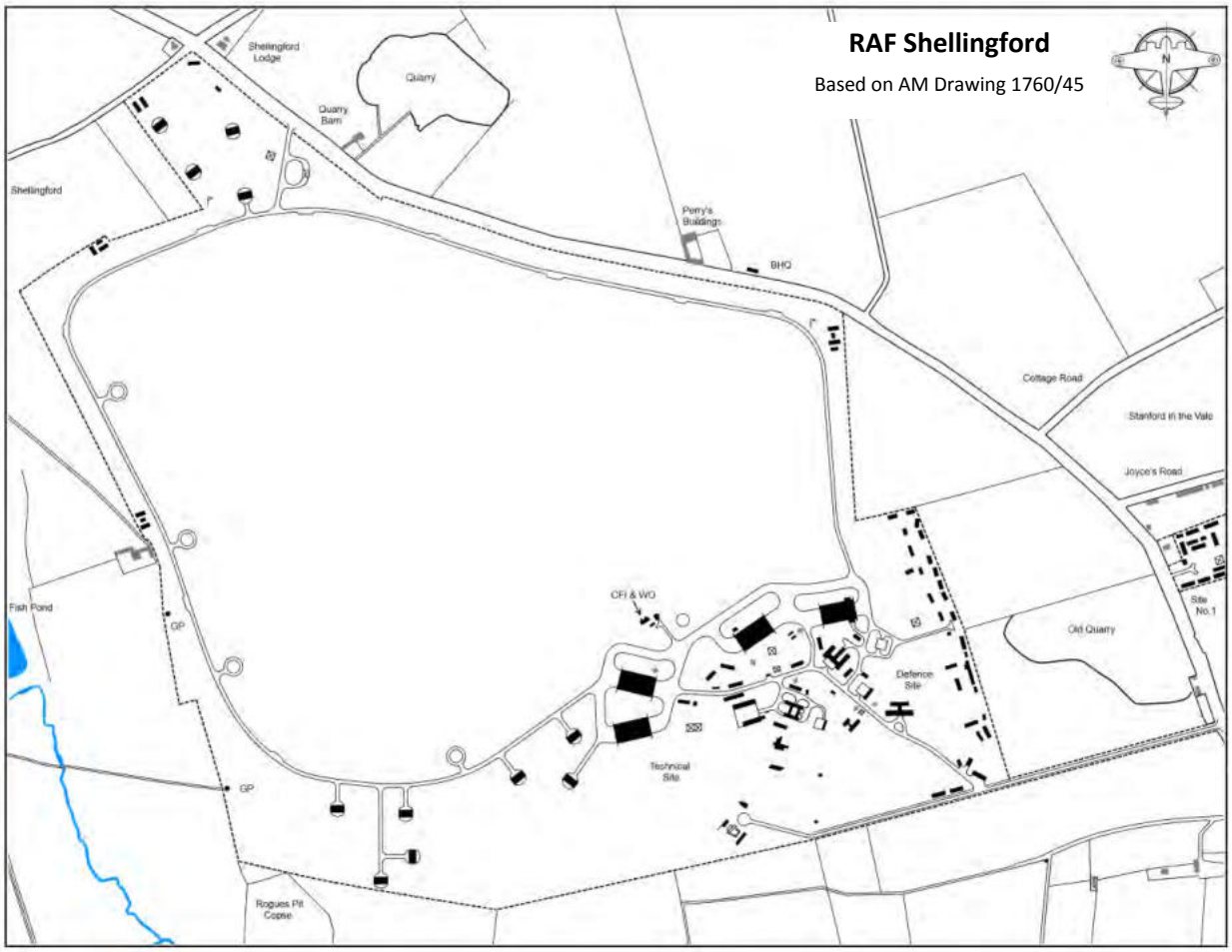
Towards the end of the 1950s the growing demands for hardcore in road building had started the first commercial clearances which were made possible by accelerating land disposal. The earliest contracts took place in counties such as Cheshire (M6) and Essex (Harlow New Town bypass). Contractors then moved into East Anglia and the Midlands, with some farmers receiving £30 per acre in areas where hardcore was in high demand. Concrete was initially broken by a one-ton steel ball dropped from a moving crane; it was then scooped up by a crawler-operated shovel and stored on the adjacent unbroken concrete awaiting processing. Lumps up to 24 inches were fed via a hopper into a crushing apparatus which reduced them to particles of between 2 and 6 inches in diameter ready for transportation by lorries. Runways, which are made up of 15-foot-square sections, were often reduced in width to a single 15-foot slab access road, but in some instances both runways and perimeter tracks have been completely removed. A typical runway might yield up to 100,000 tons, enough for several miles of motorway.

8. Representative Airfield Layouts

Examples of six temporary stations are shown below. They are based on the Air Ministry record site plan for each site (see page 34). It is sometimes found that there is some variance between the intended layout and that which actually existed as can be seen from post-war aerial photography in English Heritage archives, or even Luftwaffe intelligence photographs where available.

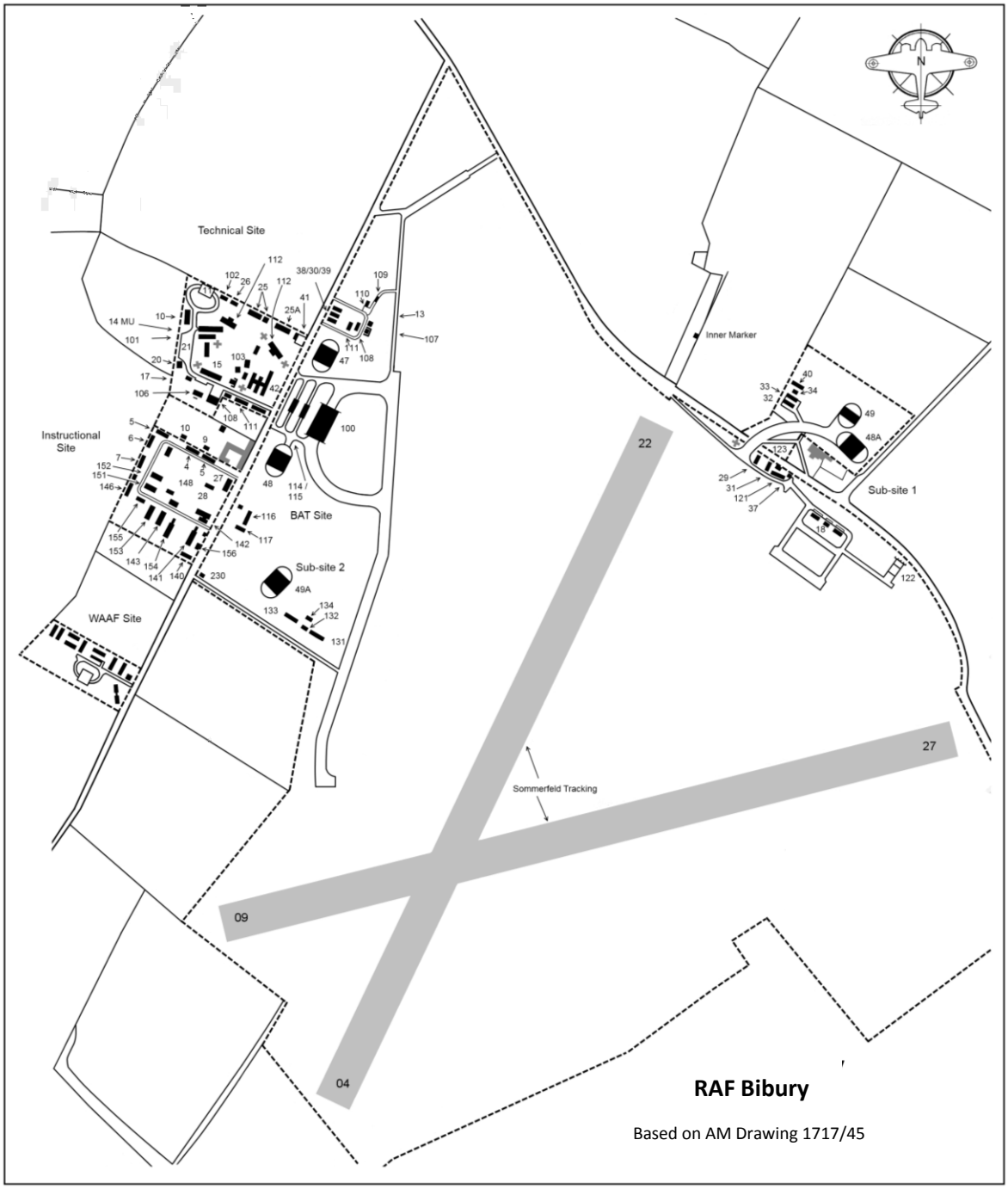


Planned back in 1940, Northleach (Glos) opened in 1942 as a satellite for nearby No.3 Glider Training School, Stoke Orchard. It was also classified as a forced landing field. Minimum facilities were available, apart from a couple of blister hangars and a few Nissen huts. The school had a complement of 14 officers and 89 other ranks. With a maximum strip length of just 1,050 yards, the grass surface was frequently in a poor state and the airfield saw relatively little use with its Miles Master 'tugs' and Hotspur gliders. Flying ceased in October 1944 and the station was finally derequisitioned in early 1946.



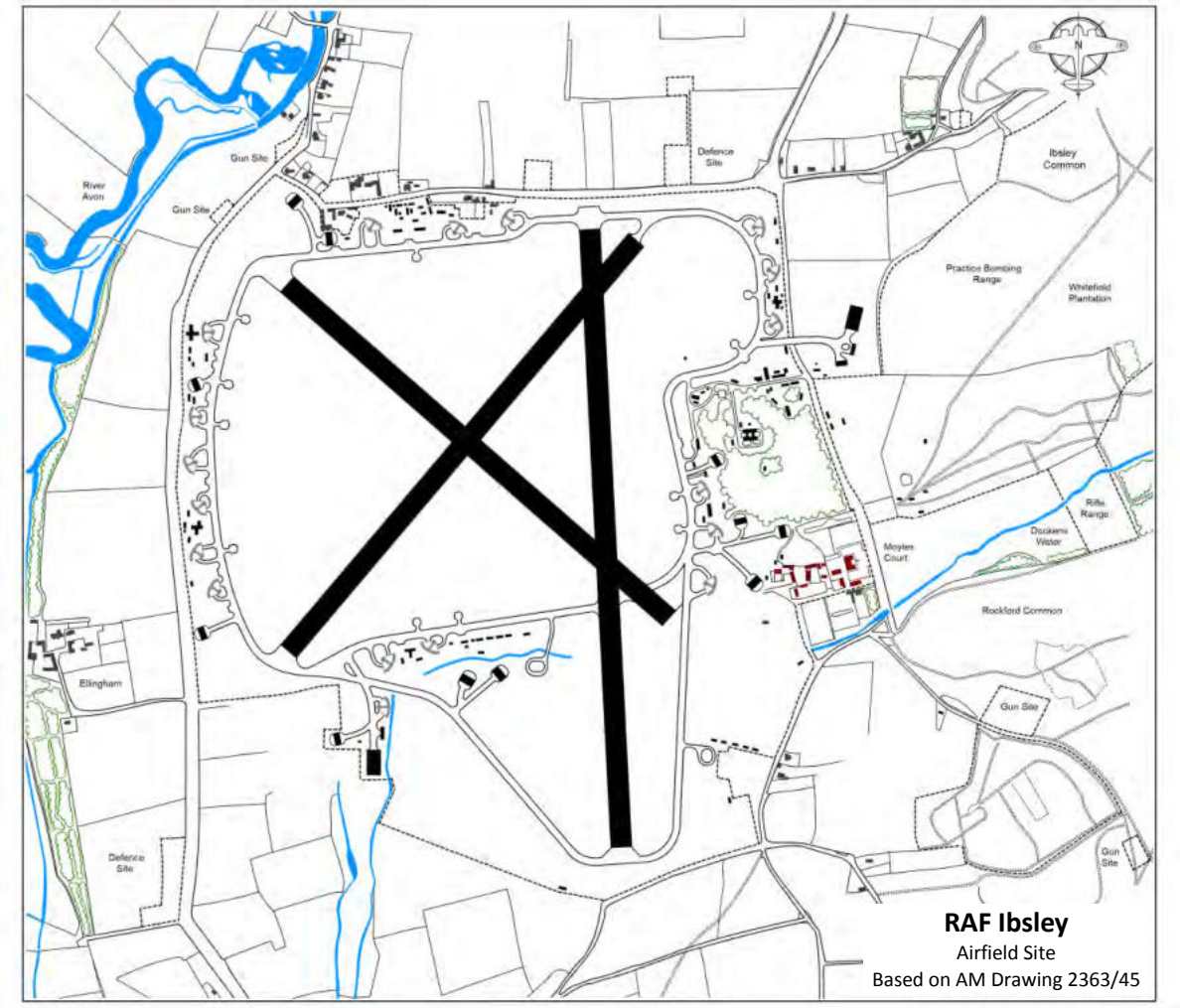
Shellingford (Oxon) – a grass surfaced Elementary Flying Training School which opened in 1941. Three landing strips were prepared, the longest (NE / SW) was 1,150 yards and the subsidiaries were 1,025 yards (E / W) and 933 yards (NW / SE). A 15-foot-wide tarmac perimeter track was provided which was more than ample for the light aircraft employed, typically the de Havilland Tiger Moth. Maintenance and storage facilities included four Bellman and eleven blister hangars. Post Second World War, after continued use as a relief landing ground, the airfield finally closed in 1948. In 1944 there were 808 RAF personnel on site.

Shellingford: Chief Flying Instructor's Office / Watch Office in 1994



Bibury (Glos) was selected as relief landing ground for nearby South Cerney (No.3 Service Flying Training School) a few months before war began; the airfield came into use in the spring of 1940 equipped with the Airspeed Oxford. In August 1940 the station became an operational fighter airfield until the end of the year, mainly with Hurricanes and Spitfires, after which it reverted to 3SFTS satellite status. No.1539 BAT flight moved in during July 1943 to provide blind / beam approach training. All flying ceased in November 1943 and the site was taken over by RAF Maintenance Command's 7 MU Quedgeley as an equipment storage depot until March 1950 when the station closed.

The airfield started with four grass strips, two of which were 1,230 yards long, but in 1942/3 the two shorter strips were overlaid with Sommerfeld tracking giving strips of 1,145 yards (04 / 22) and 1,175 yards (09 / 27). It had five blisters and a T1 hangar, and was staffed in 1944 by 543 RAF officers and other ranks of the MU, plus 100 WAAF.



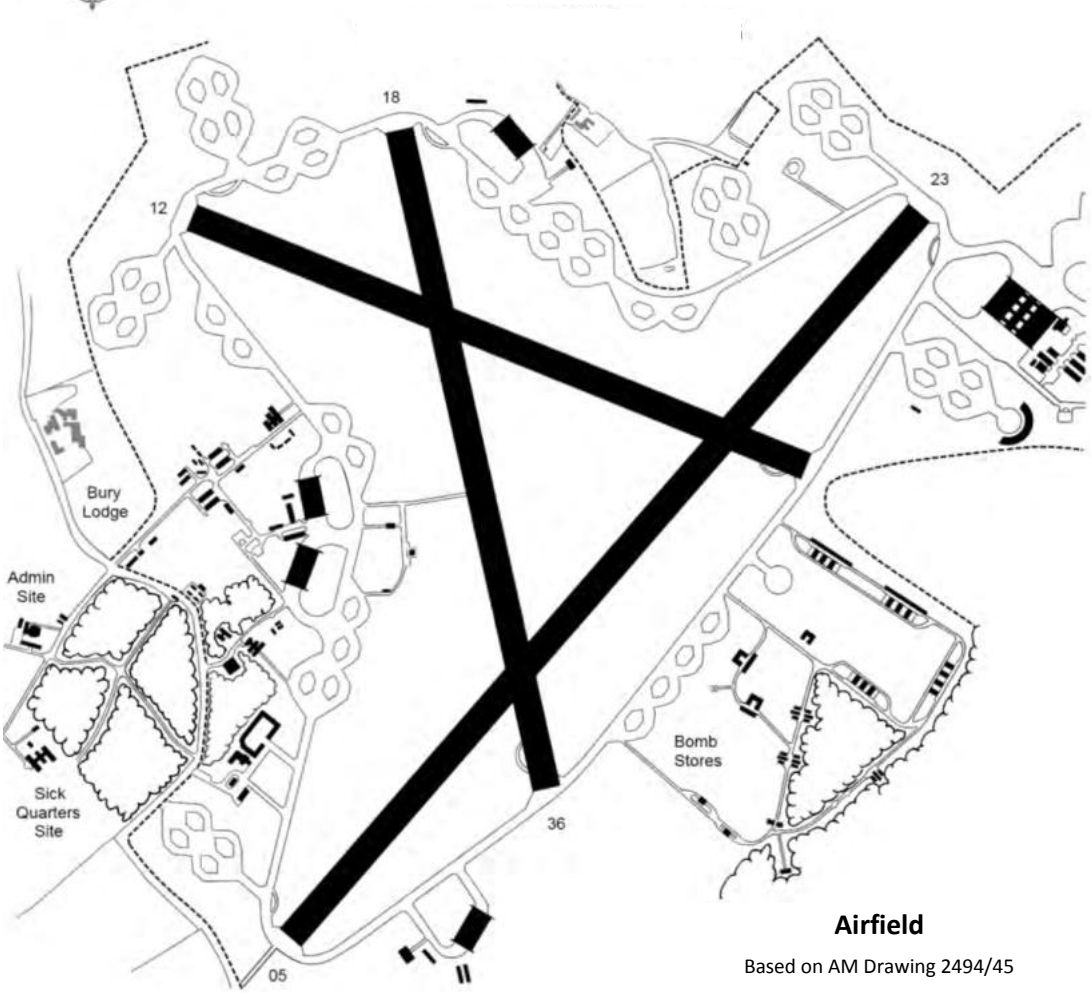
Ibsley (Hants) – a forward fighter airfield which opened in 1941 and featured several dispersed sites. The main runway was 1,600 yards in length and the two subsidiaries were 1,350 and 1,400 yards. The station had 2 Bellman hangars, 12 blisters and 18 double fighter pens. In late 1944 it was staffed by 1,811 RAF officers and airmen, plus 388 WAAF. The base closed to flying shortly after the end of hostilities and was used briefly as a storage site by No.49 Maintenance Unit, the Repair and Salvage Depot at Faygate. The site was finally derequisitioned in 1948.

Overleaf:

Stansted Mountfichet (Essex) was built in 1942 by a US Engineering Air Battalion, opening in July 1942. Commonly known as 'Stansted', it was a full Class 'A' airfield intended for use with heavy bombers, having 4 T2 hangars, plus 48 loop and 2 'frying pan' hardstandings. It was transferred to the US Ninth Air Force operating B-26 Marauder medium bombers, and became the largest Ninth AF base in East Anglia. The complement in December 1944 was 417 US officers, plus 2,241 enlisted airmen. In October, modifications began to add extensive maintenance facilities for all the USAAF's B-26s. An extra 24 loop hardstandings and two T2 hangers were added to the new site, known as 2 Tactical Air Depot, at Takeley to the east of the airfield. When the Americans left in August 1945, the entire site was used for storage of redundant equipment by RAF Maintenance Command, and also for German PoWs.

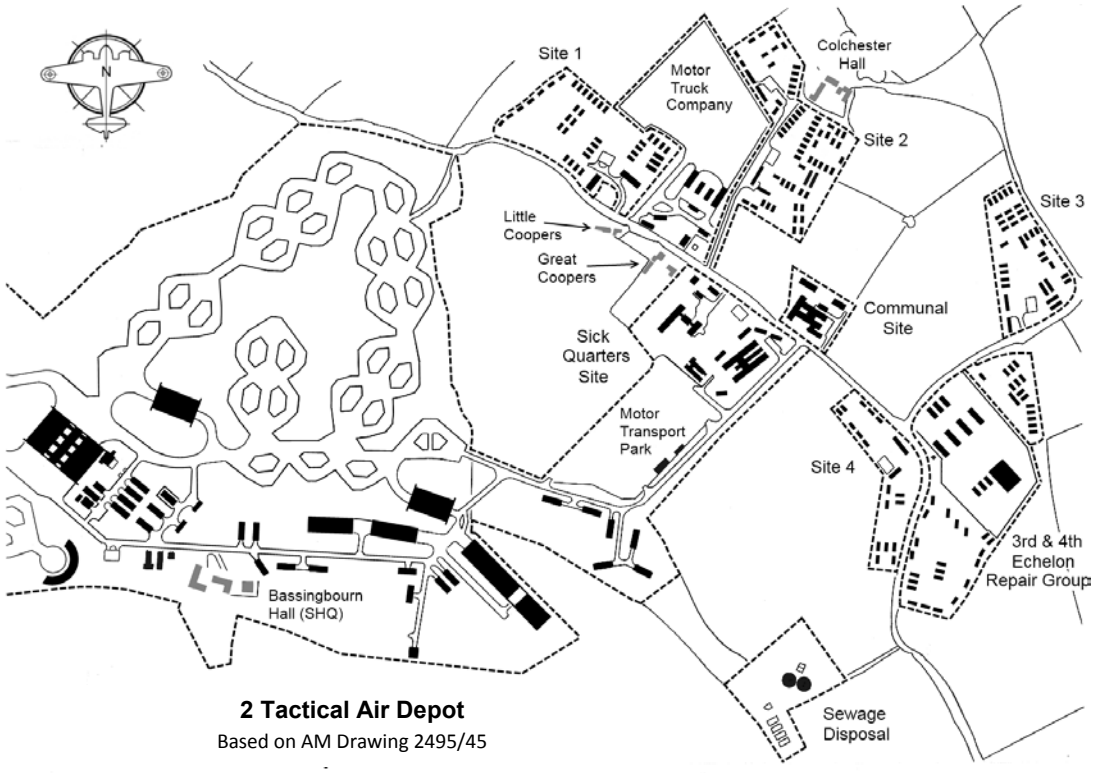
During the 1950s the Americans returned to extend the runway by 4,000 feet; it was also widened and strengthened and upgraded hardstandings were then added for use as reserve airbase during the Cold War. The site was used commercially from the late 1950s until the mid 1980s when it was significantly expanded, becoming the UK's third busiest airport, often described as London's Third Airport.

RAF Stansted Mountfitchet 1945



Airfield

Based on AM Drawing 2494/45



2 Tactical Air Depot

Based on AM Drawing 2495/45

9. THE DATABASE

The Excel spreadsheet contains two categories of Second World War airfields:

Temp: Temporary airfields – developed from Expansion Scheme 'M'

Others: This category contains Expansion Period stations prior to Scheme 'M' plus other significant stations that were in existence before these schemes were formulated, e.g. Netheravon. This list has been included since many of the airfields are still extant in some form today and contain important architectural features.

For flexibility the sheet contains the whole of England; however it is possible to sort or filter on any parameter, e.g. 'county', 'surface', 'score' etc.

Each airfield is shown with its county, English Heritage reference number (if applicable) and wartime usage, together with details of remaining structures and 'ratings'.

COLUMN HEADINGS

Name – this is the name used in December 1944 as given in TNA AIR10/4039 – *SD310 RAF Airfields & Flying Boat Bases & RN Air Stations in the UK*.
Other names, official or otherwise may be in use, e.g.

- Pre 1944 names (Hartford Bridge became Blackbushe)
- Spelling inconsistencies (RAF Kingscliffe is in the parish of Kings Cliffe)
- Post 1944 (Holme became Holme-on-Spalding-Moor)

County – the modern English county is used. A few airfields straddle two or even three counties.

EH# – English Heritage Object Unique Identifier

Surface – either hard (concrete, tarmac etc), track (see p14/15), or grass landing area

Func(tion) – the most common usage during the conflict, (see page 31)

Rwy/Twy (Runway/taxi-way) – the number is the percentage of original runway and taxi-way remaining.

Disp(ersals) – RAF bomber stations would usually accommodate either two 2-flight squadrons or one 3-flight squadron and would typically have 36 dispersals located around the perimeter track for the aircraft. American airfields were constructed usually with 50 hardstandings. The figure given is the percentage of these remaining.

Tech(nical) **Site** – This was the 'main site' on the airfield which contained the largest concentration of buildings, a few examples being:

- stores (parachute, dinghy, lubricants, gas clothing, fabric, aircraft equipment)
- shelters (night flying equipment, ambulance and fire tender)
- workshops and maintenance blocks, motor transport garages and workshops, crew locker and drying rooms, photographic section.

Disp(ersed) **Sites** – These are described on page 17. Sadly most of the temporary dispersed sites investigated have now been demolished; only three stations had more than a third of the original buildings remaining. It is common in many cases to find the sewage site still in use by the local community.

Ammo Stores Bomber stations in particular had extensive storage facilities for bombs and machine-gun ammunition. These may have been in two separate groups on older stations and were always sited remote from other structures. Fighter and coastal stations had smaller facilities.

CT(s) Control Tower – The building was frequently referred to as the watch office by the RAF. A '✓' shows that it exists (some albeit in a very sad state). A very small number of stations (e.g. Cark, Cumbria) had an earlier (often single-storey) design replaced by an updated version; both are indicated if present.

Hangars The number and types of hangars provided on airfields varied tremendously. Some minor stations had none, bomber stations frequently had three sheds but some had up to eight large hangars, whilst naval airfields could have several dozen small sheds.

Ops Operations Block. This vital building was found on operational and operational training stations. Originally attached to the control tower it became a separate entity in its own right in 1941, usually on a sub-site.

BHQ Battle headquarters. This underground defence structure was constructed on airfields from 1940, usually on high ground overlooking the site. The most common designs consisted of three interlinked rooms and an observation post with a cupola just above ground level. A main entrance led down to a corridor, and there was an escape hatch for the observation post. It would have been manned by the station C/O in the event of the airfield coming under attack, from which he could co-ordinate the defences. With the threat of invasion greatly reduced, BHQ construction ceased c.1943. Where extant they are frequently flooded.

Def(ences) In addition to the above a number of pillboxes were constructed on and adjacent to the airfield. The percentage remaining is shown.

Mem(orial) Many stations, especially operational ones now have a modern memorial to commemorate the site.

Rating This is the score (out of ten) for the overall status of the site (see page 33)

CL Contemporary Landscape – Is the view across the airfield generally unchanged from that in 1945?

The ratings allocated to the various headings were obtained from local knowledge and by inspection of Google Earth and Bing Bird's-eye View in conjunction with record site plans. It was noticed that many structures have disappeared since the internet-based aerial views were compiled.

AIRFIELD FUNCTIONS

Although many airfields were built for a specific task and used exclusively for that purpose, a significant number had a variety of roles. In particular many stations allocated to the US Army Air Forces were used by fighters, bombers and troop-carrying aircraft all within a couple of years; this was inevitable as the needs of the Allied air forces changed. A number of airfields had two or more functions, for example aircraft supply units often had a training facility. A few stations had many roles, e.g. Acaster Malbis (Yorks) went from an operational fighter station to

a pilot training unit, then bomber operational, bomber training and finally became a storage site between 1942 and 1944.

Accurate 'snap-shots' regarding usage are available, for example December 1944, but by this time many units had relocated to France. Similarly the airfields were at their busiest in mid 1944, but again requirements changed daily as preparation for the invasion were underway. The usage stated is a general representation of what each preformed during World War Two.

Several sources were used including TNA: AIR22/326 *USAAF Units in the UK, Location Statement* and TNA: AIR10/3955-63 *SD161 – Location of RAF Units.* As an example Snailwell (FB1U) was an RAF operational fighter base which became a USAAF bomber station.

A Airborne Forces (paratroops or gliders)

ASU Aircraft Supply Unit (includes the satellite landing grounds)

B1 Bomber, Operational

B2 Bomber, Training, typically an OTU, a conversion unit which would upgrade twin-engined crews to the four-engined heavy bombers, or Lancaster finishing school (converting Halifax or Stirling trained crews).

C Coastal Command (both operational and training)

E Emergency Landing Ground

F1 Fighter Operational, later usage was Air Defence of Great Britain and 2nd Tactical Air Force.

F2 Fighter Training, typically an OTU

G Gunnery training

L Landing ground with minimal or no facilities, often a subsite of a flying training unit, or a temporary site used infrequently or for a short period

M Manufacturing/civilian maintenance

N Naval stations – these were of two types, first and second line. The former was for operational squadrons, typically disembarked from their aircraft carriers. Second line squadrons were training units.

Ta Advanced training, typically Advance Flying Units (Pilot or Observer). These would take newly qualified pilots from the Empire Training Scheme and accustom them to the problems associated with UK flying, e.g. congestion, bad weather and the possibility of enemy interaction.

Te Elementary training, typically service or elementary flying training schools equipped with Tiger Moths. Successful pilots would then be sent abroad to the Empire Training Scheme airfields.

TF Fighter Training, typically an OTU

N Naval

P Transport (both operational and training)

R Reconnaissance

S Support/storage/special purpose

U Occupied by the US army or navy air forces

OVERALL RATING

This is roughly the scaled sum of the previous scores, but weighted in favour of buildings and structures as opposed to runways and dispersals etc. The value stated depends on many factors – typically how much of the original site remains, percentage of original main hangars remaining, buildings in good state or repair etc. Modern memorials are not relevant.

In addition an 'X Factor' was taken into consideration; this might be because of some significant structure remaining, e.g.

- Langham (Norfolk) – dome trainer
- Rednal (Salop) – operations training block
- Tempsford (Beds) – 'barn' used by SOE agents about to fly into enemy territory
- Henstridge (Somerset) – the dummy deck.

A further factor is the historical significance of the site, e.g.

- Woodhall Spa (Lincs) became the operational base of the 617 Sqn, the Dambusters
- Hunsdon (Herts) was the station used for Operation *Jericho*, (the Amiens Prison Raid)
- Polebrook (Northants) was associated with Clark Gable
- Tibenham (Norfolk) – James Stewart
- Twinwood Farm (Beds) – the last sighting of Glen Miller.

There is also artwork to be considered, particularly at USAAF stations. A sheet is provided in the database listing known examples. Unfortunately many of these exist at stations which are very poor in other respects, hence the overall score is low.

An airfield with even minor remains will score 1 point. Primitive sites with negligible facilities, e.g. RLGs and SLGs will not rate highly even though they are relatively unchanged.

The maximum score obtained by scaling is 7/10. This is believed to be acceptable as, compared with some remaining Scottish and Welsh counterparts, English airfields unfortunately do not fare well.

The main gate at Polebrook, Northants, USAAF Station 110 photographed in 1980.
A 'J' hangar can be seen in the distance, one of the few remaining buildings on the site which was home to Clark Gable in 1943. Twenty years later the airfield had three Thor IR nuclear missiles. (photo G Crisp)

10. Appendix – Airfield Record Site Plans

The RAF Museum, Hendon, holds a large number of RSPs, a list of which is shown below.

Note:

The list also includes Air Ministry sites other than airfields, e.g. depots, headquarters, radar and radio stations.

Airfields which are still MoD property (or were until recently) are excluded from the list.

A small number of stations are missing, e.g. there is no RSP for Wrexham.

The number of sheets for a specific site varies from just one up to possibly a dozen due to a number of factors, e.g. the physical size of the site or the drawing scale. Some sites have several plans for different time periods.

The Museum (RAFM) may be contacted here:

http://www.rafmuseum.org.uk/research/

http://www.rafmuseum.org.uk/london/collections/archive/site_plans.cfm

http://www.rafmuseum.org.uk/research/contact.cfm

There is also the Department of Research and Information Service (DORIS) – email: research@rafmuseum.org. State clearly what you want, give a terrestrial address and phone number and they will copy and mail them to you with an invoice.

Abbots Bromley	Balderton	Blackbushe	Brentwood	Castletown	Condover
Abbotsinch	Ballyhalbert	Blakehill Farm	Bridgnorth	Catfirth	Coningsby
Abingdon	Banff	Bletchley Park	Bridleway Gate	Catfoss	Coolham
Acaster	Bangor	Blyton	Brize Norton	Catterick	Cosford
Akeman Street	Bardney	Boa Island	Broadwell	Cattewater	Cottam
Alconbury	Barford St John	Bodney	Brockworth	Caxton Gibbet	Cottesmore
Aldergrove	Barkston Heath	Bodorgan	Brough	Chailey	Cranage
Aldermaston	Barnham	Bognor	Bruntingthorpe	Chalgrove	Cranfield
Allerton Park	Barnwood	Bolt Head	Brunton	Charlton Horethorne	Cranwell
Alness	Barrow	Bolt Tail	Bungay	Charmy Down	Crawley
Alton Barnes	Barton	Booker/Marlow	Burbage	Charterhall	Croft /Neasham
Altringham	Bassingbourn	Boreham	Burn	Cheadle Hulme	Crosby
Alvaston	Battlestead Hill	Boscombe Down	Bury St Edmunds	Chedburgh	Crosslaw
Amport House	Beanacre	Boston	Bushmills	Chedworth	Croughton
Andover	Beaulieu	Boston Docks	Bylaugh Hall	Chelveston	Croydon
Andreas	Beccles	Boston Spa	Caistor	Chigwell	Cuckney
Andrewsfield	Beck Row/Mildenhall	Bottesford	Calshot	Chilbolton	Culmhead
Angle	Bedford	Bottisham	Calveley	Chilmark	Dalcross
Annan	Benbecula	Bourn	Cambridge	Chipping Norton	Dale
Ansty	Benson	Bovingdon	Cammeringham	Chipping Ongar	Dallachy
Appledram	Bentley Priory	Bowes	Camp Hill	Chipping Warden	Dalton
Ascot	Bentwaters	Bowlee	Cardiff	Chivenor	Danesfield
Ashbourne	Bibury	Bowmore	Cardington	Christchurch	Darley Moor
Ashford	Bicester	Boxted	Carew Cheriton	Church Broughton	Davidstow Moor
Aston Down	Biggin Hill	Brackla	Cark	Church Fenton	Daws Hill
Atcham	Birch	Bradwell-on-Sea	Carnaby	Church Lawford	Deanland
Atherstone	Bircham Newton	Brafferton	Carpenders Park	Cleave	Debach
Attlebridge	Bircotes	Bramcote	Castle Archdale	Clyffe Pypard	Debden
Ayr	Bishops Court	Brandy Bay	Castle Bromwich	Cluntoe	Deenethorpe
Babdown Farm	Bisterne	Bratton	Castle Camps	Coleby Grange	Defford
Baginton	Bitteswell	Brawdy	Castle Combe	Collaton Cross	Denton
Bagots Wood	Blaby Wharf	Braybrooke	Castle Donington	Coltishall	Deopham Green
Balado Bridge	Blackbrook	Breighton	Castle Kennedy	Compton Bassett	Derby

Desborough
Desford
Detling
Digby
Docking
Doncaster
Donibristle
Donna Nook
Dounreay
Down Ampney
Downham Market
Driffield
Drem
Dumfries
Dundonald
Dunholme Lodge
Dunkeswell
Dunkirk
Dunsfold
Dunstable
Duxford
Earls Colne
Earsham
East Fortune
East Kirkby
East Moor
East Retford
East Wretham
Eastburn
Eastchurch
Eastcote
Eastleigh
Edge Hill
Egginton Hall
Eglinton
Elgin
Elmdon
Elmswell
Elsham
Elveden Hall
Enstone
Errol
Escrick
Eshott
Essendine
Evanton
Eye
Eynsham
Fairford
Fairlop
Fairmile
Fairoaks
Fairwood Common
Faraid Head
Farnborough
Fazakerley
Fearn
Felixstowe
Feltham
Feltwell
Fersfield
Filton
Findo Gask
Finmere
Finningley
Firbeck
Fiskerton
Folkingham
Ford
Fordoun
Forres
Foulsham
Fowey
Fowlmere
Framlingham
Fraserburgh
Full Sutton
Gallow Hill
Gamston
Gittisham
Glatton
Glazebrook
Gosfield
Gosport
Goxhill
Grafton Underwood
Grangemouth
Gransden Lodge
Grantham
Graveley
Gravesend
Great Ashfield
Great Bromley
Great Dunmow
Great Massingham
Great Orton
Great Sampford
Greencastle
Greenham Common
Greenock
Grimsby
Grimsetter
Grove
Groveley Wood
Gullane/Drem
Hack Green
Halesworth
Halfpenny Green
Halstead
Halton
Hampden-in-Arden
Hampstead Norris
Handforth
Hardwick
Harlaxton
Harlescott
Harlow
Harpur Hill
Harrington
Harrowbeer
Harwell
Havant
Haverfordwest
Hawarden
Hawkinge
Hawksb'ge/ Denham
Headcorn
Heaton Park
Hednesford
Hell's Mouth
Hendon
Henley
Henlow
Heston
Hethel
Hibaldstow
High Ercall
High Halden
High Roding
Hinstock
Hinton-in-the-Hedges
Hixon
Hockering
Hockley Heath
Holme
Holmpton
Holmsley South
Honeybourne
Honiley
Honington
Hooton Park
Hope Cove
Horham
Hornchurch
Horn'ch/Suttons Fm
Horne
Horsham St Faith
Hucknall
Hunsdon
Hurn
Husbands Bosworth
Hutton Cranswick
Ibsley
Ingham
Inverbervie
Inverness
Inverness Longman
Inverness Raigmore
Islay/Port Ellen
Ivybridge
Jurby
Keevil
Kelmscott
Kelstern
Kelvedon Hatch
Kenley
Kenton Bar
Ketteringham Hall
Kidbrooke
Kidlington
Killadeas
Kimbolton
Kings Cliffe
Kingsnorth
Kingston Bagpuize
Kirkham
Kirkcolm
Kirkpatrick
Kirkwall
Langar
Langford Lodge
Langham
Larkhill
Lasham
Lashenden
Lavenham
Lawford
Lee-on-Solent
Leicester East
Leighton Buzzard
Leiston
Lerwick
Leuchars
Leysdown
Lichfield
Limavady
Linley
Lissett
Little Fancy
Little Horwood
Little Rissington
Little Snoring
Little Sutton
Little Walden
Littleport
Llanberis
Llandaff
Llandow
Llandwrog
Llangefni (Hospital)
Llantwit Major
Long Kesh
Long Marston
Long Newton
Long Parish
Long Range
Longley Lane
Longtown
Lords Bridge
Lossiemouth
Loughborough
Little Staughton
Ludford Magna
Ludham
Lulsgate Bottom
Lydd
Lymington
Lympne
Lytham
Macmerry
Madley
Maghaberry
Malpas
Manchester
Manorbier
Manston
Marham
Market Harborough
Marks Hall
Marston Moor
Marsworth
Martlesham Heath
Massiey?
Matching
Matlask
Maydown
Melbourne
Meldreth
Melksham
Melton Mowbray
Membury
Mendlesham
Mepal
Merryfield
Merston
Metfield
Metheringham
Methwold
Middle Wallop
Middleton St George
Middleton Stoney
Milfield
Mill Green
Millersford
Millisle
Millom
Milltown
Milton
Milton Ernest
Misson
Molesworth
Mongewell Park
Monkmoor
Monks Risborough
Montford Bridge
Montrose
Moreton Valence
Moreton-in-Marsh
Morfa Towyn
Morpeth
Morton Hall
Mount Batten
Mount Farm
Mount Wise
Mullaghmore
Mullion
Neasham/Croft
Neaton/Watton
Needs Oar Point
Netheravon
New Romney
New Zealand Farm
N'castle/Longbenton
Newton of Novar
Newtownards
Neyland
North Coates
North Creake
North Hylton
North Killingholme
North Pickenham
North Weald
North Witham
Northleach
Northolt
Norton
Norton Disney
Nuneaton
Nuneham Park
Nuthampstead
Nutts Corner
Okehampton
Oakley
Oatlands Hill
Odiham
Old Buckenham
Old Sarum
Ollerton/Hinstock
Orfordness
Oulton
Ouston
Over Wallop
Overton Heath
Oxford
Padgate/H'ton Gn
Padstow
Panshanger
Pear Tree /Start Point
Pembrey
Pembroke Dock
Pen Park
Penkridge
Penolver
Penrhos
Penshurst
Peplow
Perranporth
Perton
Peterborough
Peterhead
Pocklington
Podington
Polebrook
Pool
Porlock
Portreath
Poulton
Predannack Down
Preston
Pucklechurch
Pulham
Quy
Rackheath
Ramsbury
Raydon
Redhill

Rednal
Ramridge Pk/Weyhill
Renfrew
Rhiwlas/Llanberis
Rhoose
Rhuddlan
Riccall
Ridgewell
Ringstead
Ringway
Riseley
Rivenhall
Roade
Rochester
Rollestone
Rosevidney
Ruislip
Saltby
Sandysike
Sandtoft
Sawbridgeworth
Scampton
Scatsa
Scorton
Scout Dike
Sculthorpe
Sealand
Seething
Seighford
Sennen
Shaftsbury
Sharnbrook
Shellingford
Shepherds Grove
Sherburn-in-Elmet
Shinfield Park
Shipdham
Shobdon
Shoreham
Shrewton
Sibson
Sidmouth/Salcombe
Silloth
Silverstone
Skeabrae
Skellingthorpe
Skipton-on-Swale
Skitten
Sleap
Smith's Lawn
Snailwell
Snaith
Snetterton Heath
Snitterfield
South Witham
Southam
Soton/Titchfield
Southbourne
Southburn
Southend/Rochford
Southrop
Spalford
Spanhoe
Speke/Liverpool
Spilsby
Squires Gate
St Angelo
St Athan
St Austell Bay
St Davids
St Eval
St Just
St Mary's
Stansted
Stanton Harcourt
Stapleford Tawney
Staplehurst
Staverton
Steeple Morden
Stisted Hall
Stoke Heath/Ternhill
Stoke Orchard
Stoney Cross
Stormy Down
Stracathro
Stretton
Sturgate
Sudbury
Sulby
Sullom Voe
Sumburgh
Sunninghill Park
Sutton Bridge
Sutton Coldfield
Sutton Valence
Sutton-on-Hull
Swannington
Swingfield
Sydenham
Sywell
Tain
Talbenny
Tangmere
Tarrant Rushton
Tatenhill
Tatton Park
Tealing
Templeton
Tempsford
Theale
Tholthorpe
Thornaby
Thorney Island
Thorpe Abbots
Thruxton
Thurleigh
Tibenham
Tilstock
Tiree
Titchfield
Tollerton
Toome
Treleaver
Trentham
Trimingham
Truro
Tuddenham
Turnberry
Turnhouse
Turweston
Twatt
Twinwood Farm
Upavon
Upottery
Upper Heyford
Upwood
Usworth
Uxbridge
Ventnor
Waddington
Walbury Hill
Walcot Hall/Wittering
Walters Ash
Waltham St Lawrence
Walton/Peterbr'gh
Warboys
Warminster
Warmwell
Wanborough
Wartling
Warwick
Watchet
Watchfield
Watnall
Wellesbourne M'ford
Wellingore
Wendling
West Freugh
West Kingsdown
West Kirby/Saughall
Westby
Westcott
Westhampnett
Weston W/T Station
Weston Zoyland
Weston-super-Mare
Wheaton Aston
Whitchurch
Whitefield
Wick
Wickenby
Wigsley
Wilmslow
Wimpole Pk Hospital
Windrush
Winfield
Wing
Winkfield
Winkleigh
Winthorpe
Witchford
Wittering
Wombleton
Woodcote
Woodley
Woolfox Lodge
Woolsington
Worksop
Wormingford
Worthy Down
Wratting Common
Wymeswold
Wythall
Wyton
Yatesbury
Yeadon
York
Zeals

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www.controltowers.co.uk/

www.abct.org.uk

http://www.airfieldresearchgroup.org.uk/

http://www.airfieldinformationexchange.org/community/forum.php

http://www.battlehq.info/

Mapping sites

Google maps with Street View: http://maps.google.co.uk/maps/

Bing (with Bird's-eye view): http://www.bing.com/maps/

Overlay, various OS maps with Google Satellite etc: http://wtp2.appspot.com/wheresthepath.htm

Overlay of OS 1:25,000 1937–61 with Google Satellite: http://maps.nls.uk/geo/explore/

Two Lincolnshire Watch Offices (Control Towers) at Strubby and Waltham

[1] Advert The Aeroplane 14-06-39

[2] AiX-ARG Archives Ltd

[3] Sir Ernest Holloway KCB OBE MICE MIM CE, (1887–1961), joined the Air Ministry works staff in 1919. He was Director General from 1939 to 1947.

[4] CAP 481 (1988 and 1991)

[5] Defence Lands Committee 1971–73

[6] Air Estimates 1939. Note that the figures for temporary airfields are unknown.

[7] FIDO was the code name used by the Petroleum Warfare Department for their dispersal of fog by heat project. It is usually associated with the term 'Fog Investigation and Dispersal Operation' until c.1945 when 'Fog, Intensive Dispersal Of' became the more accepted acronym.

[8] In the early years of the war the Vickers Wellington twin-engined bomber was the type used for training and operations. When the four-engined bombers came into use, a crew would still train initially on the Wellington, but then transfer to a Heavy Conversion Unit where they would learn to operate the Stirling, Halifax and eventually the Lancaster bomber. A flight engineer would be added to the crew at this stage.

Name	County	HE NRHE#	Surface	Func	Rwy / Twy	Disp	Tech Site	Disp Sites	Ammo Stores	CT(s)	Hangars	Ops	BHQ	Def	Mem	Rating	C L
Abbots Bromley	Staffs	1383061	Grass	Te	10	0	0	0	0	-	1 (9)	-	-	-	-	1	-
Acaster Malbis	Yorks	1211876	Hard	FTaB	60	50	10	20	25	✓	1 (3)	-	✓	✓	-	5	✓
Akeman Street	Oxon		Grass	Ta	15	0	0	0	0	-	0 (11)	-	-	✓	-	1	-
Alconbury	Cambs	1073347	Hard	B1U	50	25	50	5	0	✓	6 (6)	-	-	-	✓	4	-
Aldermaston	Berks	1383220	Hard	AU	70	0	10	5	0	-	3 (5)	-	-	-	✓	3	-
Andrews Field	Essex	1383372	Hard	BF1U	5	0	0	5	5	-	2 (2)	-	-	-	✓	2	-
Ansty	Warwicks	1009794	Hard	M	10	0	20	0	0	-	? (>4)	-	-	-	-	1	-
Anthorn	Cumbria	1369329	Hard	N	95	5	0	5	0	-	0 (33)	-	-	-	-	2	-
Appledram	Sussex	1383398	ALG	F1	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Ashbourne	Derbs	1383428	Hard	A	60	5	5	5	10	-	1 (4)	-	-	-	-	2	-
Ashford	Kent	1383463	Grass	F1U	0	0	0	0	0	-	0 (3)	-	-	-	-	0	-
Atcham	Salop	1383487	Hard	F2U	5	0	5	0	0	-	6 (11)	-	✓	✓	-	2	-
Attlebridge	Norfolk	1383539	Hard	B1U	80	30	5	5	10	✓	1 (3)	✓	✓	-	✓	5	-
Babdown Farm	Glos	1383567	Track	Ta	50	5	5	0	0	-	4 (12)	-	-	-	-	2	-
Balderton	Notts	1383620	Hard	AU	5	0	0	0	0	-	0 (5)	-	-	-	-	1	-
Bardney	Lincs	1383627	Hard	B1	30	5	10	5	15	✓	2 (3)	-	-	-	✓	3	-
Barford Saint John	Oxon	1383700	Hard	B2	90	50	5	0	0	-	0 (2)	✓	-	-	-	3	-
Barkston Heath	Lincs	1383736	Hard	AU	100	95	15	20	15	✓	6 (7)	✓	-	✓	-	6	✓
Barnsley Park	Glos		SLG	ASU	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Barrow	Cumbria		Hard	G	90	20	5	15	0	✓	2 (18)	-	✓	✓	-	5	✓
Barton Abbey	Oxon		SLG	ASU	0	0	50	0	0	-	0 (2)	-	-	-	-	4	✓
Battlestead Hill	Staffs	1383896	Grass	Te	0	0	0	0	0	-	0 (3)	-	-	-	-	0	-
Beaulieu	Hants	1158277	Hard	F1U	5	5	0	5	0	-	0 (3)	-	-	-	-	1	-
Beccles	Suffolk	1383971	Hard	C	40	5	30	30	0	-	2 (2)	✓	-	-	-	4	-
Beechwood Park	Herts	1412897	SLG	ASU	0	0	0	0	0	-	0 (2)	-	-	-	-	0	-

Bekesbourne	Kent	1384068	Grass	S	0	0	0	0	0	-	0 (2)	-	-	-	✓	0	-
Bentwaters	Suffolk	1317888	Hard	F1	90	80	65	5	0	✓	2 (2)	-	-	-	✓	7	-
Berrow	Hereford / Worcs		SLG	ASU	0	0	10	0	0	-	0 (?)	-	-	-	-	1	-
Bibury	Glos	918495	Track	Ta	40	5	0	5	0	-	3 (6)	-	-	-	-	3	-
Birch	Essex	1385730	Hard	B1U	10	5	0	0	0	-	0 (2)	-	-	-	-	1	-
Bircotes	Yorks	1385753	Grass	B2	20	5	0	0	0	-	1 (3)	-	-	-	-	1	-
Bisterne	Hants	1385861	ALG	F1U	0	0	0	0	0	-	0 (5)	-	-	-	-	0	-
Bitteswell	Leics	1385877	Hard	B2	0	0	0	0	0	-	0 (2)	-	-	-	-	0	-
Blackbushe	Hants	1385924	Hard	F1	70	5	0	0	0	-	0 (9)	-	-	-	-	2	-
Blakehill Farm	Wilts	1385937	Hard	A	5	0	10	20	20	-	0 (2)	-	-	-	✓	1	-
Blidworth	Notts		SLG	ASU	10	0	0	0	0	-	0 (1)	-	-	-	-	1	-
Blyton	Lincs	1380159	Hard	B2	25	5	0	0	0	-	0 (3)	-	-	-	-	1	-
Bodney	Norfolk	1386169	Grass	F1U	10	0	5	5	5	✓	0 (5)	✓	✓	✓	✓	3	-
Bognor	Sussex	1386337	ALG	F1	0	0	0	0	0	-	0 (4)	-	-	-	✓	0	-
Bolt Head	Devon		Track	F1	10	5	5	0	0	-	0 (2)	-	-	-	✓	1	-
Booker	Bucks	1386372	Grass	Te	90	0	10	5	0	-	4 (8+)	-	-	✓	✓	4	✓
Boreham	Essex	1386508	Hard	B1U	10	10	5	5	0	✓	1 (2)	✓	-	-	✓	2	-
Bottesford	Leics	1387184	Hard	AU	70	15	50	5	15	✓	10 (10)	-	-	-	✓	5	-
Bottisham	Cambs	1387300	Track	F1U	5	0	0	5	0	-	0 (9)	-	-	-	✓	1	-
Boulmer	Northum	1387328	Hard	F2	5	0	0	0	0	-	0 (4)	-	-	✓	-	1	-
Bourn	Cambs	1387354	Hard	B1	70	0	5	5	10	-	3 (3)	-	-	-	-	2	✓
Bovingdon	Herts	1387368	Hard	SU	50	5	5	10	10	✓	0 (4)	-	-	-	-	2	-
Boxted	Essex	1387399	Hard	BF1U	5	0	15	0	5	-	0 (2)	✓	-	-	✓	1	-
Bradwell Bay	Essex	1387504	Hard	F1	45	5	5	5	0	✓	5 (13)	-	✓	✓	✓	4	-
Bratton	Salop	1387721	Grass	Ta	0	0	0	0	0	-	0 (5-10)	-	-	✓	-	1	-
Bray	Berks	1388149	Grass	Te	5	0	0	0	0	-	0 (0?)	-	-	-	-	1	✓
Brayton Park / Hall	Cumbria		SLG	ASU	10	0	0	0	0	-	0 (1)	-	-	-	-	1	-

Breighton	Yorks	1211965	Hard	B1	75	40	0	15	5	-	1 (3)	-	-	-	✓	3	-
Brenzett	Kent	1388863	ALG	F1	0	0	0	0	0	-	0 (5)	-	-	-	✓	0	-
Bridleway Gate	Salop	1388878	Grass	Ta	0	0	0	0	0	-	0 (10)	-	-	-	-	0	✓
Brinklow / Bretford	Warwicks		SLG	ASU	10	0	0	0	0	-	0 (?)	-	-	-	-	1	-
Broadwell	Oxon	1389096	Hard	A	15	5	5	5	0	✓	0 (2)	✓	-	-	-	2	-
Brockton	Salop		SLG	ASU	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Broxbourne	Essex		Grass	M	0	0	0	0	0	-	0 (5)	-	-	-	-	0	-
Bruntingthorpe	Leics	1389177	Hard	B2	70	10	30	5	25	✓	2 (5)	-	✓	-	-	3	-
Brunton	Northum	1389221	Hard	F2	95	50	0	0	0	-	0 (4)	-	-	-	-	3	✓
Bungay / Flixton	Suffolk	1389350	Hard	B1U	5	0	0	15	5	-	0 (2)	✓	-	-	✓	4	-
Burn	Yorks	1309034	Hard	B1	90	5	10	5	5	-	0 (3)	✓	-	-	✓	3	-
Burnfoot	Cumbria	1389446	Grass	Te	10	0	0	0	0	-	0 (5)	-	-	-	-	1	-
Burscough	Lancs	1389801	Hard	N	20	5	30	10	40	-	13 (34)	-	-	✓	✓	3	-
Burtonwood	Lancs	1390446	Hard	SU	5	5	0	5	0	-	0 (16)	-	-	✓	✓	1	-
Bury St Edmunds / Roughar	Suffolk	1390366	Hard	B1U	5	0	30	10	40	✓	1 (2)	-	✓	-	✓	4	-
Bylaugh Hall	Norfolk		Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Caistor	Lincs	1390457	Grass	Te	5	5	5	5	0	-	1 (4?)	-	-	-	-	2	-
Calveley	Cheshire	1390464	Hard	Ta	5	0	40	5	0	✓	3 (7)	-	-	✓	-	3	-
Cark	Cumbria	1381510	Hard	Ta	50	30	15	15	0	✓✓	1 (20)	-	✓	✓	-	5	✓
Carnaby	Yorks	1390822	Hard	E	90	0	0	0	0	-	0 (0)	-	-	-	-	2	-
Castle Camps	Cambs	1390914	Hard	F1	5	0	0	5	0	-	0 (9)	-	-	✓	✓	1	-
Castle Combe	Wilts	1390950	Track	Ta	80	0	10	0	0	✓	0 (6)	-	-	-	✓	3	-
Castle Donnington	Leics		Hard	B2	45	5	5	0	15	-	1 (2)	-	-	✓	-	3	-
Caxton Gibbet	Cambs	1391429	Grass	Te	50	0	0	0	0	-	0 (7)	-	-	✓	-	1	-
Chailey	Sussex	1391448	ALG	F1	5	5	5	0	0	-	0 (4)	-	-	-	✓	1	-
Chalgrove	Oxon	1391467	Hard	ARU	100	0	0	5	10	-	1 (2)	-	-	-	✓	3	✓
Charlton Horethorne	Somerset	1391537	Grass	N	5	0	5	5	0	-	0 (6)	-	✓	-	-	1	-

Charmy Down	Somerset	984216	Hard	Ta/U	5	10	5	5	0	✓	0 (12)	-	✓	✓	-	3	-
Chedburgh	Suffolk	1391609	Hard	B12	5	0	10	5	5	✓	0 (6)	-	?	-	✓	2	-
Cheddington	Bucks	1391721	Hard	B1U	10	5	20	5	10	-	0 (4)	-	-	✓	✓	2	-
Chedworth	Glos	1512433	Hard	F2	15	5	5	10	0	-	1 (2)	-	✓	-	-	2	-
Chelveston	Northants	1317824	Hard	A/B1U	0	0	0	0	10	-	0 (3)	-	-	-	✓	1	-
Chetwynd	Salop	1391766	Grass	Ta	90	0	0	0	0	-	0 (7)	-	-	✓	-	3	✓
Chickerell	Dorset	1486549	Grass	N	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Chilbolton	Hants	1391787	Hard	F1U	5	0	0	25	0	-	0 (5)	✓	-	✓	✓	2	-
Chipping Norton	Oxon	1391820	Track	Ta	10	0	0	0	0	-	0 (12)	-	-	-	-	1	-
Chipping Ongar	Essex	1391856	Hard	B1U	5	5	0	5	0	-	0 (2)	-	-	-	-	1	-
Chipping Warden	Northants	1391875	Hard	B2	50	10	20	5	0	-	5 (5)	-	-	✓	-	3	-
Chivenor	Devon	1391894	Hard	C	90	60	60	5	10	-	8 (9)	✓	-	✓	-	7	-
Church Broughton	Derbs	1517075	Hard	B2	10	5	5	5	10	-	1 (2)	-	-	-	-	2	-
Church Lawford	Warwicks	1392104	Hard	Ta	5	0	5	0	0	✓	1 (17)	-	-	✓	-	2	-
Cleave	Cornwall	1392203	Grass	army	15	0	5	0	0	-	0 (3)	-	-	✓	-	1	-
Clyffe Pypard	Wilts	1392256	Grass	Te	40	0	20	0	0	-	1 (19)	-	✓	✓	-	3	-
Coleby Grange	Lincs	1155832	Grass	F1	10	5	0	0	0	✓	1 (9)	-	-	✓	-	2	-
Colerne	Wilts	1392369	Hard	F2/ASU	100	50	50	0	0	-	11 (13-18)	-	-	✓	-	7	✓
Collyweston	Northants	1392398	Grass	F1	0	0	0	0	0	-	0 (4)	-	-	✓	-	1	-
Condover	Salop	1392444	Hard	Ta	10	5	5	5	0	✓✓	1 (8-10)	-	✓	-	-	3	-
Coningsby	Lincs	1392488	Hard	B1	80	20	50	0	10	-	4 (6)	✓	-	-	✓	6	-
Coolham	Sussex	1392500	ALG	F1	5	5	0	0	0	-	0 (5)	-	-	-	✓	1	-
Cottam	Yorks	1392698	Hard	S	5	0	0	0	0	-	0 (1)	-	-	-	-	1	-
Cowdray Park	Sussex	1392719	Grass	N	10	5	5	0	0	-	2 (25)	-	-	-	-	1	-
Cranage	Cheshire	1365531	Track	Ta	10	5	5	5	0	-	0 (12)	-	✓	✓	-	2	-
Croft / Neasham	Yorks	1392998	Hard	B1	35	0	5	5	0	-	0 (3)	-	-	-	✓	2	-
Crosby-on-Eden	Cumbria	1393032	Hard	P	80	50	5	5	0	✓	3 (11)	-	-	-	-	4	✓

Croughton	Northants	1393075	Grass	Ta	50	40	40	0	0	✓	4 (14)	✓	-	✓	-	5	-
Culham	Oxon	1393286	Hard	N	50	5	35	0	0	-	12 (32-44)	-	-	-	-	3	-
Culmhead	Somerset	1393300	Hard	F1	90	15	10	10	0	✓✓	1 (11)	-	-	✓	-	4	-
Dalton	Yorks	1393319	Hard	B12	60	5	20	15	15	-	2 (3)	-	-	-	-	4	-
Darley Moor	Derbs	1393337	Hard	A	50	10	20	5	5	-	0 (1)	-	-	-	-	2	-
Davidstow Moor	Cornwall	1391220	Hard	C	75	25	20	15	40	✓	0 (3)	-	-	-	✓	4	✓
Deanland	Sussex	1393374	ALG	F1	25	0	5	0	0	-	0 (4)	-	-	-	-	1	-
Debach	Suffolk	1393386	Hard	B1U	5	0	20	5	10	✓	0 (2)	✓	-	-	✓	3	-
Deenethorpe	Northants	514393	Hard	B1U	30	0	10	15	10	-	0 (2)	✓	-	-	✓	2	-
Defford	Hereford /	1393570	Hard	F1/S	70	0	30	10	0	-	1 (12)	-	-	-	✓	2	-
Denton	Northants	1393604	Grass	Te	10	0	0	0	0	-	0 (10)	-	-	-	-	1	✓
Deopham Green	Norfolk	1393612	Hard	B1U	35	10	0	15	5	-	0 (2)	-	-	-	✓	3	-
Derby / Burnaston	Derbs	1393632	Grass	Te	0	0	0	0	0	-	0 (10)	-	-	✓	-	1	-
Desborough	Northants	1393638	Hard	B2	15	0	5	40	5	-	3 (4)	-	-	-	-	3	-
Docking	Norfolk	1393787	Grass	Ta	5	0	5	5	0	✓	0 (8)	-	-	✓	✓	2	-
Donna Nook	Lincs	1393840	Grass	C	0	5	10	10	0	-	0 (3)	-	-	-	-	1	-
Down Ampney	Glos	1393865	Hard	A	45	10	0	0	0	-	0 (2)	-	-	-	✓	2	-
Down Farm, Westonbirt	Glos		SLG	ASU	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Downham Market	Norfolk	1393883	Hard	B1	15	0	35	20	10	-	0 (6)	-	-	-	✓	2	-
Dunholme Lodge	Lincs	1156191	Hard	B1	5	0	5	0	0	-	0 (3)	-	-	-	✓	1	-
Dunkeswell	Devon	1394048	Hard	NU	80	50	50	10	40	✓	2 (5)	✓	✓	-	✓	6	✓
Dunsfold	Surrey	1394109	Hard	F1	85	15	5	0	0	✓	3 (13)	-	✓	-	✓	4	✓
Earls Colne	Essex	1394861	Hard	B1U	5	0	5	5	5	-	2 (2)	-	-	-	✓	1	-
East Kirkby	Lincs	1394879	Hard	B1	10	5	5	0	0	✓	4 (7)	-	-	-	✓	2	-
East Moor	Yorks	1185461	Hard	B1	35	10	10	15	5	-	0 (3)	-	-	-	✓	2	-
East Wretham	Norfolk	1394934	Grass	F1U	10	0	20	5	50	-	1 (9)	✓	-	✓	✓	3	-
Edgehill	Oxon	1394994	Hard	B2	30	10	10	0	0	✓	0 (3)	-	-	-	✓	3	-

Elmdon	Warwicks	1395007	Hard	Te	60	0	5	0	0	✓	2 (15)	-	✓	✓	-	3	-
Elsham Wolds	Lincs	1395120	Hard	B1	40	5	0	0	0	-	2 (3)	-	-	-	✓	2	-
Elvington	Yorks	1168119	Hard	B1	30	15	25	5	0	✓	3 (3)	-	-	-	✓	5	-
Enstone	Oxon	1395143	Hard	B2	90	15	10	10	0	✓	1 (2)	-	-	-	-	4	-
Eshott	Northum	1395153	Hard	F2	75	25	5	5	0	-	0 (9)	-	-	-	-	2	✓
Everleigh	Wilts		SLG	ASU	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Eye	Suffolk	1395175	Hard	B1U	65	5	5	5	5	-	1 (2)	✓	-	-	✓	3	-
Fairford	Glos	1395188	Hard	A	30	5	20	5	40	-	2 (2)	-	-	-	-	2	-
Fairlop	Essex	1395214	Hard	F1S	0	0	0	0	0	-	0 (20)	-	-	-	-	0	-
Faldingworth	Lincs	1395240	Hard	B1	50	5	0	5	5	-	1 (3)	-	-	-	✓	2	-
Falmouth	Cornwall		Water	C	-	0	0	0	0	-	0 (0?)	-	-	-	-	0	-
Fersfield	Norfolk	1395332	Hard	SU	30	0	20	40	0	-	1 (2)	✓	-	-	-	3	-
Finmere	Bucks	1395387	Hard	F2	40	0	5	15	10	✓	2 (3)	-	✓	-	-	4	-
Firbeck	Yorks	1395420	Grass	Te	0	0	0	0	0	-	0 (2)	-	-	-	✓	0	-
Fiskerton	Lincs	1395431	Hard	B1	10	0	0	0	0	-	0 (3)	✓	-	-	✓	1	-
Folkingham	Lincs	1395452	Hard	AU	35	10	0	0	0	-	0 (2)	-	-	-	-	1	-
Foulsham	Norfolk	1395463	Hard	B1	5	0	5	20	5	-	4 (10)	-	-	-	✓	2	-
Fowlmere	Cambs	1395480	Track	F1U	10	0	5	5	0	-	1 (8)	-	-	-	✓	3	-
Framlingham	Suffolk	1395515	Hard	B1U	15	5	20	10	10	✓	1 (2)	✓	-	-	✓	3	-
Friston	Sussex	1395535	Grass	F1	10	0	0	0	0	-	0 (2)	-	-	-	-	1	-
Frost Hill Farm	Hants	1395584	Grass	unused	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Fulbeck	Lincs	1395548	Hard	AU	15	10	5	5	0	-	0 (5)	-	-	-	✓	1	-
Full Sutton	Yorks	1134162	Hard	B1	20	5	25	15	0	-	2 (3)	✓	-	-	-	2	-
Funtington	Sussex	1395567	ALG	F1	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Gamston	Notts	1395602	Hard	B2	75	20	60	10	20	✓	1 (5)	✓	-	-	-	4	✓
Gaydon	Warwicks	1395626	Hard	B2	20	5	5	0	0	✓	0 (2)	-	-	-	✓	2	-
Glatton	Cambs	514395	Hard	B1U	50	0	0	5	5	-	0 (2)	-	-	-	✓	1	-

Gosfield	Essex	1395745	Hard	B1U	35	5	10	0	5	✓	0 (2)	-	-	-	✓	2	-
Goxhill	Lincs	1395792	Hard	F2U	15	10	30	10	0	-	3 (7)	✓	✓	✓	✓	4	-
Grafton Underwood	Northants	1395839	Hard	B1U	5	5	10	10	10	-	0 (2)	✓	✓	✓	✓	2	-
Gransden Lodge	Cambs	1395998	Hard	B1	5	0	5	5	5	✓	1 (3)	✓	-	-	✓	2	-
Grantham / Spitalgate	Lincs	1410996	Track	Ta	90	0	60	0	90	✓	5 (19)	✓	✓	✓	-	7	✓
Graveley	Cambs	1396003	Hard	B1	5	0	0	5	5	✓	0 (4)	✓	-	-	✓	2	-
Great Ashfield	Suffolk	1396127	Hard	B1U	20	0	0	10	10	-	0 (2)	✓	✓	-	✓	2	-
Great Dunmow	Essex	1396161	Hard	B1U	5	0	15	0	5	-	0 (3)	-	-	-	✓	1	-
Great Massingham	Norfolk	1396194	Hard	B1	20	5	5	10	0	-	1 (4)	-	-	-	-	2	-
Great Orton	Cumbria	1396216	Hard	C	40	20	5	10	0	-	0 (3)	-	-	-	-	1	-
Great Sampford	Essex	1396246	Track	S	50	0	0	5	0	-	0 (10)	-	-	✓	-	1	-
Greenham Common	Berks	928617	Hard	AU	5	0	10	0	5	✓	1 (2)	-	-	-	-	2	-
Grimsby / Waltham	Lincs	1396460	Hard	B1	40	5	10	0	0	✓	4 (4)	-	-	-	✓	3	-
Grove	Oxon	1203361	Hard	AU	5	0	20	10	0	-	1 (6)	✓	✓	-	✓	2	-
Grove Park	Notts		SLG	ASU	0	0	0	0	0	-	0 (0?)	-	-	-	-	0	-
Halesworth	Suffolk	1396620	Hard	BF1U	10	0	0	5	10	-	0 (2)	✓	-	-	✓	2	-
Halfpenny Green	Staffs	1396705	Hard	Ta	90	5	60	5	0	✓	3 (16-23)	-	-	✓	-	5	✓
Hammerwood	Sussex		Grass	army	0	0	0	0	0	-	0 (0?)	-	-	-	-	0	-
Hampstead Norris	Berks	1308458	Hard	A	10	0	5	5	10	-	0 (2)	-	-	✓	-	2	-
Hamworthy / Poole	Dorset		Water	C	-	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Hardwick	Norfolk	1396672	Hard	B1U	40	0	0	25	5	-	0 (3)	-	-	-	✓	2	-
Hardwick Park	Derbs	1579382	SLG	ASU	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Harlaxton	Lincs		Grass	Ta	50	0	0	0	0	-	0 (18)	-	-	-	-	1	-
Harrington	Northants	1155853	Hard	B1U	5	0	5	5	15	-	0 (4)	✓	-	-	✓	2	-
Harrowbeer	Devon	1396862	Hard	F1	5	15	0	10	10	-	0 (10)	-	✓	✓	✓	2	-
Headcorn	Kent	1397073	ALG	F1U	0	0	0	0	0	-	0 (5)	-	-	-	✓	0	-
Heathrow	Middx	1041461	Hard	P	70	0	0	0	0	-	0 (2+)	-	-	-	✓	1	-

Heigham Holmes	Norfolk		Grass	S	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Henley-on-Thames	Berks	1397286	Grass	Ta	0	0	0	0	0	-	0 (6)	-	-	✓	-	1	-
Henstridge	Somerset	1397307	Hard	N	55	10	20	10	0	✓	10 (30)	✓	-	-	-	5	-
Hethel	Norfolk	1397392	Hard	B1U	40	0	0	5	0	✓	2 (3)	-	-	-	✓	5	-
Hibaldstow	Lincs	1397428	Hard	F2	85	0	5	10	0	✓	0 (13)	-	✓	-	✓	4	✓
High Ercall	Salop	1397458	Hard	F2/ASU	10	0	60	5	0	-	12 (16-28)	-	-	✓	-	6	-
High Halden	Kent	1397537	ALG	F1U	0	0	0	0	0	-	0 (5)	-	-	-	-	0	-
Hinstock / Ollerton	Salop	1397560	Track	N	10	0	10	0	0	✓	5 (10)	-	-	-	-	3	-
Hinton-in-the-Hedges	Northants	1397580	Hard	S	40	5	5	5	5	-	0 (3)	-	✓	✓	-	2	-
Hixon	Staffs	1397674	Hard	B2	50	20	30	15	0	✓	4 (5)	-	✓	-	✓	4	-
Hoar Cross	Staffs		SLG	ASU	50	0	0	0	0	-	0 (1)	-	-	-	-	1	-
Hockley Heath	Warwicks	1397727	Grass	Te	10	0	0	0	0	-	0 (6)	-	-	-	-	1	-
Hodnet	Salop		SLG	ASU	0	0	20	0	0	-	0 (1?)	-	-	-	-	1	-
Holme(on-Spalding-Moor)	Yorks	1249963	Hard	B1	5	0	35	5	0	-	3 (6)	-	-	-	✓	2	-
Holmsley South	Hants	1397754	Hard	B1U	10	55	0	5	0	-	0 (5)	-	✓	-	✓	2	-
Honeybourne	Here/Worc	1370860	Hard	B2	20	10	60	25	0	✓	5 (5)	-	✓	-	-	5	-
Honiley	Warwicks	1397801	Hard	F1	40	5	5	5	0	-	0 (24)	-	-	-	-	2	-
Horham	Suffolk	1579381	Hard	B1U	35	0	0	10	5	-	0 (2)	-	-	-	✓	3	-
Hornby Hall	Cumbria		SLG	ASU	0	0	0	0	0	-	1 (1)	-	-	-	-	1	-
Horne	Surrey	1398099	ALG	F1	10	0	0	0	0	-	0 (4)	-	-	-	✓	1	-
Hunsdon	Herts	1368874	Hard	F1	10	0	5	0	0	-	0 (17)	-	✓	✓	✓	4	-
Hurn	Dorset	1398712	Hard	B1U	90	50	20	0	0	✓	12 (20)	-	-	-	-	4	-
Husbands Bosworth	Leics	1398732	Hard	B2	10	0	10	10	5	✓	0 (4)	✓	-	-	-	2	-
Hutton Cranswick	Yorks	1398738	Hard	F1	5	0	5	0	0	-	1 (9)	-	✓	✓	-	2	-
Hutton-in-the-Forest	Cumbria		SLG	ASU	10	0	0	0	0	-	0 (1)	-	-	-	-	1	-
Hythe	Hants		Water	M	-	0	0	0	0	-	1 (?)	-	-	-	-	1	-
Ibsley	Hants	1398758	Hard	F1U	5	0	10	10	0	✓	0 (14)	-	✓	✓	✓	3	-

Ingham	Lincs	1390525	Grass	B12	50	5	10	5	0	✓	1 (3)	-	-	-	✓	3	-
Inskip	Lancs	1398777	Hard	N	10	20	0	5	0	-	0 (34)	-	-	-	-	1	-
Keevil	Wilts	1399579	Hard	AU	100	90	5	30	25	✓	1 (10)	-	✓	-	✓	6	✓
Kelmscott	Oxon	1399598	Grass	Ta	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Kelstern	Lincs	1399632	Hard	B1	10	0	0	0	0	-	0 (3)	-	-	-	✓	1	-
Kiddington (Glympton)	Oxon	1400862	Grass	Ta	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Kimbolton	Cambs	1400904	Hard	B1U	5	5	0	0	0	-	0 (2)	-	-	-	✓	1	-
Kingscliffe	Northants	1400916	Hard	F1U	5	5	5	10	0	✓	0 (14)	-	✓	✓	✓	3	-
Kingsnorth	Kent	1401027	ALG	F1U	0	0	0	0	0	-	0 (5)	-	-	-	-	0	-
Kingston Bagpuize	Oxon	1401038	Track	AU	10	0	15	0	0	✓	0 (7)	-	-	-	-	2	-
Kirmington	Lincs	1401149	Hard	B1	80	5	0	0	0	-	0 (3)	-	-	-	✓	2	-
Knettishall	Suffolk	1401198	Hard	B1U	15	0	0	5	5	-	1 (2)	-	-	-	✓	2	-
Knowsley Park	Lancs		SLG	ASU	0	0	0	0	0	-	0 (2?)	-	-	-	-	0	-
Lacey Green	Bucks		Grass	L	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Lakenheath	Suffolk	1401227	Hard	B1	80	20	30	5	0	-	4 (6)	-	✓	-	✓	5	-
Langar	Notts	1401266	Hard	AU	85	40	20	10	50	✓	4 (4)	-	-	-	✓	5	✓
Langham	Norfolk	1401295	Hard	C	50	20	5	10	0	✓	0 (7)	-	✓	✓	-	4	-
Larks Barrow	Hants	1402437	Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Lasham	Hants	1401339	Hard	F1	95	60	5	5	15	-	2 (4)	-	-	-	✓	4	✓
Lashenden	Kent	1401346	ALG	F1U	50	0	0	0	0	-	0 (4)	-	-	-	✓	1	-
Lavenham	Suffolk	1401598	Hard	B1U	10	0	20	10	5	✓	0 (2)	-	-	-	✓	3	-
Leicester East	Leics	1401958	Hard	P	50	30	5	5	5	✓	1 (4)	-	-	-	-	3	✓
Leiston	Suffolk	1401968	Hard	F1U	5	0	10	5	0	-	0 (14)	-	-	-	✓	2	-
Lichfield	Staffs	927224	Hard	B2	10	10	5	0	15	-	13 (18)	-	-	✓	✓	2	-
Lissett	Yorks	1401983	Hard	B1	10	0	25	5	0	-	0 (2)	-	-	-	✓	1	-
Little Horwood	Bucks	1401986	Hard	B2	10	0	0	5	10	-	0 (2)	-	-	-	-	1	-
Little Snoring	Norfolk	1402041	Hard	B1	15	0	0	5	0	✓	2 (5)	-	-	-	-	3	-

Little Staughton	Cambs	1402054	Hard	B1	45	10	35	25	30	✓	3 (11)	-	✓	-	✓	6	-
Little Sutton	Cheshire	1402064	Grass	Te	5	0	5	0	0	-	1 (3)	-	-	-	-	1	-
Little Walden	Essex	1402069	Hard	BF1U	5	0	0	5	5	✓	2 (2)	✓	-	-	-	3	-
Littleworth	Hereford / Worcs		Grass	L	10	0	5	0	0	-	0 (0)	-	-	-	-	1	-
Long Marston	Warwicks	1402106	Hard	B2	80	25	5	15	0	✓	0 (2)	-	✓	✓	-	4	-
Long Newnton	Wilts	1402109	Track	Ta	50	5	10	5	0	✓	1 (10)	-	-	✓	-	4	-
Longtown	Cumbria	1402194	Hard	P	15	0	0	0	0	-	0 (3)	-	-	-	-	1	-
Lord's Bridge	Cambs	1579377	Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Loughborough	Leics		Grass	M	0	0	0	0	0	-	0 (3)	-	-	-	-	0	-
Ludford Magna	Lincs	1317878	Hard	B1	5	0	0	20	5	-	0 (7)	✓	-	-	✓	2	-
Ludham	Norfolk	1402206	Hard	N	15	0	0	10	0	✓✓	0 (12)	-	-	✓	-	3	-
Lulsgate Bottom	Somerset	1402392	Hard	Ta	80	10	5	5	0	-	2 (8)	-	✓	-	-	3	-
Lydd	Kent	1402412	ALG	F1	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Lymington	Hants	1030597	ALG	F1U	20	0	0	0	0	-	1 (4)	-	-	-	-	1	-
Madley	Hereford /	1402537	Hard	TS	65	0	10	10	0	-	5 (18)	-	-	-	-	4	-
Manningford	Wilts		Grass	Te	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Market Harborough	Leics	1405719	Hard	B2	5	0	0	5	0	-	0 (5)	-	✓	-	-	1	-
Marston Moor	Yorks	1221589	Hard	B2	55	5	60	10	10	✓	6 (7)	-	-	-	-	4	-
Matching	Essex	1405952	Hard	B1U	5	0	10	10	5	✓	0 (2)	-	-	-	✓	2	-
Matlask	Norfolk	1405958	Grass	F1	5	5	0	5	0	-	0 (6)	-	✓	✓	-	2	-
Melbourne	Yorks	1229385	Hard	B1	65	10	20	5	5	✓	2 (3)	-	-	-	✓	4	-
Melton Mowbray	Leics	1156379	Hard	P	40	0	0	5	0	-	0 (4)	-	-	-	-	2	-
Membury	Berks	1258917	Hard	ARU	20	5	20	10	10	-	4 (4)	-	-	-	✓	4	-
Mendlesham	Suffolk	1406010	Hard	B1U	5	0	5	5	0	-	1 (2)	-	-	-	✓	1	-
Mepal	Cambs	1142708	Hard	B1	5	0	0	10	0	-	0 (3)	-	-	-	✓	1	-
Merrow	Surrey		Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Merryfield	Somerset	1406037	Hard	AU	100	40	10	0	25	✓	0 (2)	-	-	-	-	3	✓

Merston	Sussex	1406099	Track	F1U	10	5	0	5	0	-	0 (18)	-	-	-	-	1	-
Metfield	Suffolk	1406209	Hard	BF1U	10	0	5	5	0	-	0 (2)	✓	-	✓	✓	2	-
Metheringham	Lincs	1406227	Hard	B1	10	5	20	15	0	✓	0 (3)	✓	-	-	✓	3	-
Methwold	Norfolk	1406253	Hard	B1S	10	0	10	15	0	-	2 (3)	-	✓	✓	✓	3	-
Middle Farm / Mixbury	Oxon		SLG	ASU	0	0	80	5	0	-	0 (0?)	-	-	-	-	2	-
Middleton St George	Durham	1406315	Hard	B1	95	0	65	0	30	✓	5 (5)	✓	✓	✓	✓	7	✓
Mildenhall	Suffolk	1406333	Hard	B1	75	30	70	0	0	-	6 (7)	-	-	-	✓	6	-
Milfield	Northum	1406365	Hard	F2	5	5	0	5	0	-	0 (10)	-	-	-	✓	1	-
Millom	Cumbria	1107992	Hard	Ta	20	0	40	10	0	-	0 (21)	-	-	✓	-	2	-
Molesworth	Cambs	1406378	Hard	B1U	0	0	5	5	5	-	3 (3)	-	-	-	✓	2	-
Montford Bridge	Salop	1406401	Hard	F2	15	5	10	5	0	✓	0 (4)	-	✓	✓	-	3	-
Moreton Valence	Glos	1406485	Hard	Ta	5	0	5	5	10	✓	0 (14)	-	-	-	-	2	-
Moreton-in-Marsh	Glos	1406464	Hard	B2	95	45	25	10	0	-	0 (5)	-	-	✓	✓	3	-
Morpeth	Northum	1406502	Hard	G	10	5	5	5	0	-	1 (20)	-	-	-	-	2	-
Mount Farm	Oxon	1406530	Hard	RU	5	0	0	0	0	-	0 (8)	-	-	-	✓	1	-
Needs Oar Point	Hants	1030596	ALG	F1	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Netherthorpe	Yorks	1413882	Grass	army	70	0	5	0	0	-	1? (?)	-	-	✓	-	2	✓
New Romney	Kent	1406674	ALG	F1	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
New Zealand Farm	Wilts	1407905	Grass	L	10	0	0	0	0	-	1 (4)	-	✓	✓	-	2	-
Newchurch	Kent	1406691	ALG	F1	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Newmarket	Suffolk	1406708	Grass	B1	5	0	0	0	5	-	1 (6)	-	-	-	✓	1	-
North Creake	Norfolk	1406870	Hard	B1	10	5	20	30	0	✓	3 (3)	-	-	-	-	4	-
North Killingholme	Lincs	1406903	Hard	B1	75	5	20	5	5	-	3 (3)	-	-	-	✓	3	-
North Luffenham	Rutland	1406794	Hard	Ta	80	25	80	0	70	✓	6 (6)	-	-	✓	-	6	-
North Pickenham	Norfolk	1155859	Hard	B1U	50	0	0	10	15	-	1 (2)	✓	-	-	✓	3	-
North Stoke	Somerset	1579125	Grass	Ta	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
North Witham	Lincs	1407153	Hard	AU	60	5	5	5	5	✓	0 (8)	-	-	-	-	3	✓

Northleach	Glos	1407162	Grass	Ta	20	0	0	0	0	-	0 (2)	-	-	-	-	1	-
Nuneaton	Leics	1407180	Hard	P	80	35	5	5	0	✓	1 (1)	-	-	-	-	4	-
Nuthampstead	Herts	1407405	Hard	BF1U	15	5	5	5	30	-	0 (2)	✓	-	-	✓	2	-
Oakley	Bucks	1407552	Hard	B2	90	5	10	10	0	-	1 (3)	-	✓	-	-	4	✓
Oatlands Hill	Wilts	1407573	Grass	army	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Old Buckenham	Norfolk	1407641	Hard	B1U	10	0	10	25	5	-	0 (2)	✓	-	-	✓	2	-
Orston	Notts	1407757	Grass	Ta	10	0	0	0	0	-	0 (9)	-	-	-	-	1	-
Ossington	Notts	1407768	Hard	B2	10	10	5	0	10	-	0 (4)	-	✓	-	-	1	-
Oulton	Norfolk	1407770	Hard	B1	65	5	5	15	40	-	0 (4)	-	-	✓	✓	2	-
Ouston	Northum	1407798	Hard	F2	90	10	80	0	15	✓	1 (9)	✓	-	✓	-	7	-
Overley/Sapperton	Glos		SLG	ASU	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Overton Heath	Wilts	1407881	Track	Ta	0	0	0	0	0	-	0 (7)	-	-	✓	-	1	-
Panshanger	Herts	1407917	Grass	Te	50	0	20	0	0	-	6 (7)	-	-	-	-	3	-
Papplewick Moor	Notts	1407924	Grass	Ta	0	0	10	0	0	-	0 (0)	-	-	-	-	1	-
Penkridge	Staffs	1408284	Grass	Te	0	0	0	0	0	-	0 (2)	-	-	-	-	0	-
Penshurst	Kent		Grass	F1	0	0	0	0	0	-	0 (1)	-	-	✓	-	1	-
Peplow	Salop	1408320	Hard	B2	10	5	10	0	0	-	4 (5)	-	-	-	-	2	-
Perranporth	Cornwall	1358103	Hard	F1/P	95	50	10	5	0	✓	0 (7)	-	✓	✓	✓	5	✓
Pershore	Hereford / Worcs		Hard	B2	90	15	10	0	0	✓	5 (5)	-	-	-	-	4	-
Perton	Staffs	1408349	Hard	Ta	0	0	0	5	0	-	0 (1)	-	-	-	✓	1	-
Pocklington	Yorks	1160195	Hard	B1	45	0	10	0	0	-	4 (4)	-	-	-	✓	3	-
Podington	Beds	1408409	Hard	B1U	20	0	40	35	5	✓	0 (2)	✓	-	-	✓	4	-
Polebrook	Northants	514391	Hard	B1U	0	0	5	5	0	-	1 (3)	-	✓	✓	✓	4	-
Portreath	Cornwall	1408485	Hard	F1	95	20	25	15	60	-	1 (12)	-	-	-	✓	4	-
Poulton	Cheshire	1578978	Hard	F2	60	20	0	10	15	-	0 (9)	-	-	-	-	2	-
Predannack	Cornwall	1408502	Hard	F1	95	95	5	5	20	✓	0 (13)	✓	-	-	✓	4	✓
Pulborough / Parham	Sussex		Grass	L	75	0	0	0	0	-	0 (0?)	-	-	-	-	2	✓

Rackheath	Norfolk	1408558	Hard	B1U	5	5	5	15	5	✓	1 (2)	-	-	-	✓	4	-
Ramsbury	Wilts	1266814	Hard	AU	5	0	0	5	0	-	0 (2)	✓	-	-	✓	1	-
Rattlesden	Suffolk	1140924	Hard	B1U	20	5	20	10	5	✓	1 (2)	✓	-	-	✓	4	-
Raydon	Suffolk	1408576	Hard	F1U	15	0	70	5	10	-	2 (2)	-	-	-	✓	3	-
Rednal	Salop	1408644	Hard	F2	90	10	40	15	0	✓	0 (11)	✓	✓	✓	-	5	-
Riccall	Yorks	1313568	Hard	B2	5	0	5	20	25	-	1 (7)	✓	-	-	✓	3	-
Ridgewell	Essex	1408711	Hard	B1U	5	0	0	15	5	-	0 (2)	-	-	-	✓	1	-
Rivenhall	Essex	1307015	Hard	B1U	10	10	0	15	0	-	1 (2)	✓	-	-	✓	2	-
Rufforth	Yorks	1197458	Hard	B2	70	15	5	0	5	✓	1 (3)	-	-	-	-	3	-
Saltby	Leics	1409180	Hard	AU	35	0	0	0	0	-	0 (5)	-	-	-	-	1	-
Sandbanks	Dorset		Water	N	-	0	5	0	0	-	1 (1)	-	-	-	-	2	-
Sandtoft	Lincs	1409203	Hard	B2	75	20	5	5	0	✓	0 (3)	-	-	-	✓	3	-
Sawbridgeworth	Herts	1394914	Track	S	15	5	25	0	0	-	0 (12)	-	✓	✓	✓	2	-
Scorton	Yorks	1409216	Hard	F1/U	0	0	5	5	0	-	1 (12)	-	-	-	✓	1	-
Sculthorpe	Norfolk	1409221	Hard	B1	95	80	10	15	10	✓	0 (5)	-	-	-	-	4	✓
Seething	Norfolk	1409228	Hard	B1U	30	0	0	20	50	✓	0 (2)	✓	-	-	✓	6	-
Seighford	Staffs	1410497	Hard	B2	15	5	0	5	10	✓	1 (2)	-	✓	-	-	3	-
Selsey	Sussex	1409230	ALG	F1	0	0	0	0	0	-	1 (5)	-	-	-	✓	1	-
Shellingford	Oxon	1409552	Grass	Te	5	0	0	0	0	✓	1 (15)	-	-	-	-	2	-
Shepherds Grove	Suffolk	1140891	Hard	B12	5	0	65	5	5	-	1 (2)	-	-	-	-	4	-
Shipdham	Norfolk	1409611	Hard	B1U	55	0	35	30	10	✓	3 (3)	-	-	-	✓	7	-
Shobdon	Hereford /	1409621	Hard	STa	70	10	5	10	0	-	4 (12)	-	-	-	-	3	-
Shoreham	Sussex	1409742	Grass	F1	80	25	25	0	0	✓	1 (4)	-	-	✓	✓	4	✓
Shrewton	Wilts	1409902	Grass	A	0	0	0	0	0	-	0 (3)	-	-	✓	-	1	-
Sibson	Cambs	1409909	Grass	Ta	30	0	0	10	0	-	1 (5)	-	-	✓	-	1	-
Silverstone	Northants	1410429	Hard	B2	75	10	0	5	0	✓	1 (5)	-	-	-	✓	3	-
Skellingthorpe	Lincs	1410431	Hard	B1	0	0	0	0	10	-	0 (3)	-	-	-	✓	1	-

Skipton-on-Swale	Yorks	1410440	Hard	B1	25	5	10	5	0	✓	0 (3)	✓	-	-	✓	2	-
Slade Farm	Oxon		SLG	ASU	0	0	25	5	0	-	1 (1)	-	-	-	-	2	-
Sleap	Salop	1410445	Hard	A	95	15	30	10	0	✓	0 (2)	-	-	-	-	4	✓
Smiths Lawn	Berks	1410512	Grass	Te	0	0	0	0	0	-	0 (2)	-	-	-	-	0	-
Snailwell	Cambs	1410536	Grass	FB1U	10	0	0	0	0	-	0 (11)	-	-	✓	-	1	-
Snaith	Yorks	1304097	Hard	B1	15	0	25	30	0	-	3 (3)	-	-	-	✓	3	-
Snetterton Heath	Norfolk	1410584	Hard	B1U	40	0	20	10	5	-	1 (2)	✓	-	-	✓	3	-
Snitterfield	Warwicks	1410589	Hard	Ta	15	0	10	5	5	-	0 (4)	-	-	-	-	2	-
Soberton	Hants		Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Somersham	Cambs		Grass	S	10	0	0	0	0	-	0 (0)	-	-	-	-	1	-
Southam	Warwicks	1410919	Grass	Te	10	0	0	0	0	-	0 (6)	-	-	-	-	1	-
Southgrove	Wilts		SLG?	ASU	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Southrop	Glos	1410936	Track	Ta	20	5	0	10	0	-	0 (10)	-	✓	✓	-	2	-
Spanhoe	Northants	1410946	Hard	AU	5	5	15	5	5	-	0 (2)	-	-	-	✓	2	-
Spilsby	Lincs	1410975	Hard	B1	5	5	0	5	0	-	1 (3)	✓	-	-	✓	2	-
St Mawgan	Cornwall	1411246	Hard	P	95	60	70	10	50	✓	2 (4)	-	-	✓	-	6	-
St Merryn	Cornwall	**141264**	Hard	N	70	5	15	10	0	✓	5 (33)	✓	-	✓	-	4	-
Stansted Mountfitchet	Essex	1227327	Hard	B1U	30	30	5	0	0	-	3 (4)	✓	-	-	✓	2	-
Stanton Harcourt	Oxon	1430057	Hard	B2	5	0	10	0	0	-	2 (2)	-	-	-	-	2	-
Staplehurst	Kent	1409265	ALG	F1U	0	0	0	0	0	-	0 (5)	-	-	-	✓	0	-
Starveall Farm	Oxon		SLG	ASU	0	0	10	5	0	-	1 (1)	-	-	-	-	2	-
Steeple Morden	Cambs	1430190	Hard	F1RU	5	0	5	5	0	-	0 (10)	✓	-	-	✓	1	-
Stoke Orchard	Glos	1430206	Grass	Ta	75	0	5	5	0	-	4 (12)	-	✓	✓	-	3	-
Stoney Cross	Hants	1430215	Hard	F1U	5	5	0	5	0	-	0 (10)	-	-	-	✓	1	-
Stratford	Warwicks	1430272	Hard	B2	5	0	5	0	0	✓	1 (3)	-	✓	✓	-	3	-
Stretton	Cheshire	1139119	Hard	N	55	5	20	5	0	-	3 (11)	-	✓	-	-	2	-
Strubby	Lincs	1430285	Hard	B1	20	5	60	10	0	✓	3 (3)	-	-	-	✓	4	-

Sturgate	Lincs	1317863	Hard	B2	15	5	30	0	10	✓	0 (3)	-	-	-	-	2	-
Sudbury	Suffolk	1430319	Hard	B1U	10	15	5	5	5	-	2 (2)	-	-	-	✓	2	-
Swannington	Norfolk	1410584	Hard	B1	10	5	5	10	10	✓	0 (3)	-	-	-	-	2	-
Swanton Morley	Norfolk	1377110	Grass	B1S	80	20	75	0	5	✓	1 (9)	✓	-	✓	✓	6	✓
Sway	Hants	1184276	Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Swinderby	Lincs	1430410	Hard	B12	85	0	10	0	5	-	4 (6)	-	✓	-	✓	3	
Swingfield	Kent	1409284	ALG	F1	0	0	0	0	0	-	0 (2)	-	-	-	-	0	-
Syerston	Notts	1411853	Hard	B12	90	70	10	0	20	✓	0 (9)	-	-	-	-	3	-
Tarrant Rushton	Dorset	1430476	Hard	A	15	5	0	5	0	-	2 (4)	-	-	-	✓	2	-
Tatenhill	Staffs	929224	Hard	Ta	80	10	40	10	10	-	0 (3)	-	✓	✓	-	3	-
Tatton Park	Cheshire	1430489	SLG	ASU	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Teddesley Park	Staffs		SLG	ASU	0	0	0	0	0	-	0 (1?)	-	-	-	-	0	-
Temple Guiting	Glos		Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Tempsford	Beds	1412791	Hard	B1	20	0	10	5	5	-	1 (7)	-	-	-	✓	2	-
Thame / Haddenham	Bucks		Grass	Ta	75	0	10	0	0	-		-	-	-	-	2	✓
Theale	Berks	1430523	Grass	Te	0	0	0	0	0	-	0 (6)	-	-	✓	-	1	-
Tholthorpe	Yorks	1331738	Hard	B1	20	5	30	5	10	✓✓	2 (3)	-	-	-	✓	4	-
Thorpe Abbotts	Norfolk	1430634	Hard	B1U	15	0	5	20	10	✓	0 (2)	-	✓	-	✓	5	-
Thruxton	Hants	1430691	Hard	AP	90	0	50	5	0	✓	1 (4)	-	-	-	-	4	✓
Thurleigh	Beds	968018	Hard	B1U	60	5	5	5	20	-	0 (4)	-	✓	-	✓	3	-
Tibenham	Norfolk	1430723	Hard	B1U	75	0	0	5	0	-	0 (2)	-	-	✓	✓	3	✓
Tilshead	Wilts		Grass	army	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Tilstock	Salop	539455	Hard	A	15	5	5	5	0	✓	4 (4)	-	✓	-	-	3	-
Townsend	Wilts		SLG	ASU	0	0	0	0	0	-	0 (0)	-	-	-	✓	0	-
Trebelzue	Cornwall	1411246	Hard	army	30	0	10	5	0	✓	0 (6)	-	-	-	-	2	-
Treligga	Cornwall	1430836	Grass	N	10	0	0	0	0	-	0 (0)	-	-	-	-	1	-
Tuddenham	Suffolk	1140873	Hard	B1	5	0	0	5	0	-	0 (2)	-	-	✓	✓	1	-

Turweston	Bucks	1430867	Hard	B2	95	20	5	5	5	✓	0 (1)	-	-	-	-	4	✓
Twinwood Farm	Beds	1430874	Hard	F2	5	5	10	15	0	✓	1 (6)	-	-	-	✓	2	✓
Upottery	Devon	1430968	Hard	AU	70	50	60	15	10	✓	0 (2)	✓	-	-	✓	4	✓
Wanborough	Wilts	1346995	Grass	Ta	0	0	0	0	0	-	0 (2)	-	-	-	-	0	-
Warboys	Cambs	1142673	Hard	B12	5	0	5	15	5	-	1 (3)	-	✓	✓	✓	2	-
Warton	Lancs	1431202	Hard	SU	90	20	20	0	0	✓	5 (12?)	-	-	-	-	5	-
Warwick	Warwicks	1431214	Grass	Ta	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Watchfield	Oxon	1411523	Grass	Ta	0	0	0	0	0	-	0 (10)	-	-	-	-	0	-
Wath Head/Jenkins Cross	Cumbria		SLG	ASU	10	0	10	0	0	-	0 (0)	-	-	-	-	1	-
Welford	Berks	1307781	Hard	AU	50	75	5	5	5	-	2 (2)	✓	-	-	✓	3	-
Wellesbourne Mountford	Warwicks	1431276	Hard	B2	60	5	10	10	0	-	4 (5)	-	✓	-	-	3	-
Wendling	Norfolk	1431325	Hard	B1U	15	0	0	5	35	-	0 (2)	✓	-	-	✓	4	-
Westcott	Bucks	1431586	Hard	B2	90	50	40	10	10	✓	5 (5)	-	-	-	-	6	-
Westenhanger	Kent	1402460	Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Westhampnett	Sussex	1431592	Grass	F1U	90	20	20	5	0	✓	1 (9)	-	-	✓	✓	4	✓
Westley	Suffolk	1431616	Grass	army	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Weston Park	Salop		SLG	ASU	0	0	0	0	0	-	0 (1)	-	-	-	-	0	-
Wethersfield	Essex	1317967	Hard	B1U	100	80	50	5	40	-	2 (2)	-	-	-	-	6	-
Weybourne	Norfolk		Grass	army	0	0	0	0	0	-	0 (0?)	-	-	✓	-	1	-
Wheaton Aston	Staffs	1412694	Hard	Ta	70	5	5	5	0	✓	0 (12)	-	-	-	-	3	-
White Waltham	Berks		Grass	ferry	50	0	5	5	0	-	4 (8)	-	-	-	✓	3	✓
Wickenby	Lincs	1412001	Hard	B1	35	0	10	10	0	✓	2 (3)	-	✓	-	✓	4	-
Wigsley	Notts	1431839	Hard	B2	5	5	0	10	10	✓	0 (3)	✓	-	-	-	1	-
Windermere	Cumbria		Water	M	0	0	5	0	0	-	0 (0?)	-	-	-	-	1	-
Windrush	Glos	1411450	Track	Ta	15	5	10	10	0	✓	2 (10)	-	✓	✓	✓	4	✓
Wing	Bucks	1431880	Hard	B2	30	5	5	20	20	-	0 (5)	-	-	-	-	2	-
Winkfield	Berks	1431885	Grass	Te	0	0	0	0	0	-	0 (5)	-	-	-	-	0	✓

Winkleigh	Devon	1407957	Hard	F1	60	15	10	10	0	✓	1 (9)	-	-	-	✓	3	-
Winkton	Hants	1030559	ALG	F1U	0	0	0	0	0	-	0 (4)	-	-	-	-	0	-
Winthorpe	Notts	1411836	Hard	B2	20	5	0	0	0	-	0 (3)	-	-	-	✓	1	-
Witchford	Cambs	1431905	Hard	B1	10	5	25	5	0	-	1 (3)	-	-	-	✓	2	-
Woburn Park / Abbey	Beds		SLG	ASU	0	0	0	0	0	-	0 (1+?)	-	-	-	-	0	-
Wombleton	Yorks	1431932	Hard	B2	70	40	10	15	5	✓	0 (4)	-	-	-	✓	3	-
Woodbridge	Suffolk	1317883	Hard	E	95	0	0	0	0	✓	1 (2)	-	-	-	-	4	-
Woodchurch	Kent	1409360	ALG	F1U	0	0	0	0	0	-	0 (5)	-	-	-	-	0	-
Woodhall Spa	Lincs	1432038	Hard	B1	5	5	5	10	30	-	1 (3)	-	-	-	✓	2	-
Woodvale	Lancs	1432078	Hard	F1	100	10	25	5	0	✓	2 (12)	-	-	-	-	6	✓
Woolfox Lodge	Rutland	1411935	Hard	B1	25	5	0	5	0	✓	0 (5)	-	-	-	-	2	-
Worcester / Perdiswell	Hereford / Worcs		Grass	Te	10	0	0	0	0	-	0? (7)	-	-	-	-	1	-
Worksop	Notts	1411831	Hard	B2	5	0	0	0	0	-	0 (2)	-	-	-	-	1	-
Wormingford	Essex	1432105	Hard	F1U	5	0	0	5	0	-	0 (2)	-	-	-	✓	1	-
Worth Matravers	Dorset		Grass	L	0	0	0	0	0	-	0 (0)	-	-	-	-	0	-
Wratting Common	Cambs	1432136	Hard	B12	10	5	10	0	5	-	3 (5)	-	-	-	✓	2	-
Wymeswold	Leics	1412076	Hard	B2	90	5	80	10	10	✓	3 (5)	-	✓	-	-	7	✓
Yeovilton	Somerset	1432195	Hard	N	85	60	50	0	10	-	16 (20)	-	-	-	✓	4	-
Zeals	Wilts	1432205	Grass	AU	10	5	0	0	0	✓	0 (9)	-	-	-	-	2	-